

ABSTRACT

Title of Dissertation: TEACHERS' ATTITUDES TOWARD INCLUSION OF
CHILDREN WITH DISABILITIES IN RURAL EL
SALVADOR

Thomas V. Sabella, Doctor of Philosophy, 2015

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The attitude of school teachers toward inclusion of children with disabilities is an important factor in the successful implementation of a national inclusion program. With the universal pressure to provide education for all and international recognition of the importance of meeting the needs of diverse populations, inclusive education has become important to governments around the world. El Salvador's Ministry of Education seeks to establish inclusion as an integral part of their struggle to meet the needs of children across the country, but this is a difficult process, especially for a country with limited resources which still struggles to meet international expectations of educational access and quality. Teacher attitude is an important factor in the success of inclusion programs and can be investigated in relation to various factors which may affect teachers' classroom practice. While these factors have been investigated in multiple countries, there is a need for more knowledge of the present situation in developing countries and especially in schools

across the rural areas of El Salvador to meet the needs of the diverse learners in that country. My research was a mixed methods case study of the rural schools of one municipality, using a published survey and interviews with teachers to investigate their attitudes regarding inclusion. This research was the first investigation of teachers' attitudes toward inclusion in rural El Salvador and explored the needs and challenges which exist in creating inclusive schools across this country. The findings of this study revealed the following important themes. Some children with disabilities are not in school and those with mild disabilities are not always getting needed services. Teachers agreed with the philosophy of inclusion, but believed that some children with disabilities would receive a better education in special schools. They were not concerned about classroom management. Teachers desired more training on disability and inclusion. They believed that a lack of resources, including materials and personnel, was a major barrier to inclusion. Teachers' attitudes were consistent regardless of family and professional experience with disability or amount of inclusion training. They were concerned about the role of family support for children with disabilities.

TEACHERS' ATTITUDES TOWARD INCLUSION OF CHILDREN WITH
DISABILITIES IN RURAL EL SALVADOR

By

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Dedication

Questioning Eyes

The deepest question I ever felt
Was in the eyes of that child
As I held his hand so he would not fall
He looked up at me but said nothing
I do not know what language
He would speak if he could
But his eyes told me more than I could take
Looking out from his scarred and
Misshaped skull
How many times had he fallen
when no one was there to see
As I stood in his world
Oceans away from my own
I stared at his silence
He seemed to be asking something. . .

If only I could answer

I would like to dedicate this study to that child I met in Calcutta, at the end of the twentieth century, with hope that he was included somewhere, sometime.

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Sr. Peggy has given years to the people of El Salvador, through war and peace and she introduced me to Los Angelitos to learn more about children with disabilities. I will always remember on my first trip she asked each of our UMD students to share with the group to "whom we belonged." I cried as I shared the story of why I had missed the first trip to El Salvador, and how I belonged to the people who came to the hospital on that day I do not remember, and many that followed, to comfort my mom and dad and Kristina and offer hope that my graduate studies had not ended.

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LIST OF ABBREVIATIONS AND ACRONYMS

ADESCO	Asociación de Desarrollo Comunal
ATDP	Attitudes Toward Disability Scale
ATIES	Attitudes Toward Inclusive Education Scale
CwD	Children with Disabilities
EDI	Educational Development Index
EDUCO	Educación con Participación de la Comunidad
EFA	Education for All
IDEA	Individuals with Disabilities Education Act
IWGDD	International Working Group on Disability and Development
LRC	Learning in Regular Classrooms
MTAI	My Thinking About Inclusion scale
MINED	Ministry of Education
OECD	Organization for Economic Co-Operation and Development
ORI	Opinions Relative to Integration
ORM	Opinions Relative to Mainstream
PSSIE	Perceived School Support for Inclusive Education scale
SDG	Sustainable Development Goals
SEN	Special Educational Needs
SPATI	School Principal's Attitudes toward Inclusion
UN	United Nations
UNESCO	United Nations Educational Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
WHO	World Health Organization
WINS	Winning Ideas Network for Schools

Chapter I

Introduction

“Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory” (Universal Declaration of Human Rights, United Nations, 1948, Article 26). The words above were written over 60 years ago in the Universal Declaration of Human Rights, yet still today in some countries children with disabilities (CwD) are half as likely to be in school as children without disabilities (UNESCO, 2008). In 1990, government representatives from around the world met in Jomtien, Thailand, and drafted the World Declaration of Education for All (EFA). Recognizing the importance of education to development, and concerned over the lack of access for so many children in developing countries, the declaration set goals for improving both access to and quality of education. UNESCO highlighted the need to develop diverse strategies to serve children of varying socioeconomic backgrounds and learning needs, including disabilities (UNESCO, 1990). Representatives from 164 governments as well as various international organizations met again in Dakar, Senegal, to reaffirm their commitment to the original document, and to set new updated goals in 2000. The resulting Dakar goals included ensuring that all children had access to free education of good quality by 2015, and improving all aspects of educational quality (UNESCO, 2008).

These meetings were instrumental events in the worldwide campaign to ensure educational access and quality for all students around the world. Since 2000, the United

Nations Educational Scientific and Cultural Organization (UNESCO) released a yearly EFA Global Monitoring Report highlighting accomplishments and remaining challenges faced by individual educational systems around the world. In 2008 the report predicted that “fifty-eight out of eighty-six countries that have not yet reached universal primary enrollment will not achieve it by 2015” (UNESCO, 2008, p.5). In 2015, UNESCO’s final EFA Global Monitoring Report stated “There are still 58 million children out of school globally and around 100 million children who do not complete primary education (UNESCO, 2015, p. i). The Sustainable Development Goals (SDG) were adopted in 2015, after the EFA goals were not fully realized by that year. Under the fourth SDG goal of Quality Education, target 4.1 states “By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes” (United Nations, 2015 p.17).

Achieving universal primary education clearly requires addressing the issues of educating children and youth with disabilities (Evans et al., 2011). From the beginning, the EFA declaration recognized that the “learning needs of the disabled demand special attention” (UNESCO, 1990, p. 5). Four years after the first EFA conference, in 1994, representatives from over 100 governments and international organizations met in Salamanca, Spain, for the World Conference on Special Needs Education. The Salamanca Framework estimated that in many developing countries, less than 1% of children with disabilities were included in the existing school systems (UNESCO, 1994a). The conference adopted what came to be known as The Salamanca Statement and a Framework for Action. The framework is guided by a principle of inclusive education, described as:

Schools should accommodate all children regardless of their physical, intellectual, social, emotional, linguistic or other conditions. This should include disabled and gifted children, street and working children from linguistic, ethnic or cultural minorities and children from other disadvantaged or marginalized areas or groups. (UNESCO, 1994a, p. 14)

These documents called for national governments and international organizations to increase their efforts to provide quality education to children with special educational needs. The Salamanca Statement defines special educational needs as “all those children and youth whose needs arise from disabilities or learning difficulties. . .” (UNESCO, 1994a, p. 6). The framework encourages governments to not only provide these students with their human right to education, but to do so in inclusive schools, and describes those schools as having:

a child centered pedagogy capable of educating all children, including those who have serious disadvantages and disabilities. The merit of such schools is not only that they are capable of providing quality education to all children; their establishment is a crucial step in helping to change discriminatory attitudes, in creating welcoming communities and in developing an inclusive society. (UNESCO, 1994a, pp.6-7)

In the spirit of inclusion, The International Standard Classification of Education released by UNESCO in 1997 distinguishes between the term “special education” and “special needs education” as follows:

The term “special needs education” has come into use as a replacement for the term “special education.” The older term was mainly understood to refer to the education of children with disabilities that takes place in special schools or institutions distinct from, and outside of, the institutions of the regular school and university system. In many countries today a large proportion of disabled children are in fact educated in institutions of the regular system. Moreover, the concept of “children with special educational needs” extends beyond those who may be included in handicapped categories to cover those who are failing in school for a wide variety of other reasons that are known to be likely to impede a child’s optimal progress. Whether or not this more broadly defined group of children are in need of additional support depends on the extent to which schools are able to adapt their curriculum, teaching and organization and/or to provide additional human or material resources so as to stimulate efficient and effective learning for these pupils. (UNESCO, 1997, p. 41)

This definition has significant impact not only on the perspective of how to best educate these children, but also in who is included in statistics (Evans et al., 2011). Under this broader view, many children not previously considered in educational statistics are now included in the numbers.

While education has been considered a human right, guaranteed by the UN Declaration in 1948 and supported by every international agreement on education since that time, people with disabilities have been continually excluded from schools until

recent legislation began to mandate their inclusion in the education systems (UNESCO, 1994a).

In the United States, for example, local laws often specifically excluded children with disabilities or special needs from the school systems until the passage of the 1975 federal Education of All Handicapped Children's Act (later renamed the Individuals with Disabilities Education Act (IDEA)) (Martin, Martin & Terman, 1996). This law called for free and appropriate public education (FAPE) for all students with disabilities. It established the "zero reject" principle, whereby no child could be excluded from school based on their disability (Silverstein, 2002). The law also demanded individualization of education to best meet the needs of every child and the most integrated setting possible for each child, recognizing the benefit to all students of not being separate from their peers. The struggle to provide the most appropriate education to all students in the United States did not end in 1975, and legislation and policy have developed over the last three decades to address the many barriers to this goal, including finding the most appropriate and least restrictive environment for each individual.

Providing Inclusive Education

The problem of access remains significant for many people with disabilities around the world. Due to both differences in disability definitions as well as the limited resources available for diagnosis in much of the world, the numbers of children with disabilities cannot be precisely calculated. UNICEF claims that "there are at least 93 million children with disabilities in the world, but numbers could be much higher" (UNICEF, 2015, ¶2). In 2003, the World Bank estimated that 40 million of the 115

million children out of school were children with disabilities (World Bank, 2003).

International agencies estimate that “more than 90 per cent of children with disabilities in developing countries do not attend schools” (UNESCO, 2013, ¶8). An EFA Flagship was established in 2002 to “act as a catalyst to ensure that the right to education and the goals of the Dakar Framework are realized for individuals with disabilities” (UNESCO, 2004, p. 10). The flagship seeks to clarify international definitions regarding disability and inclusive education. A working definition of inclusion is presented in the UNESCO Conceptual Paper “Overcoming Exclusion through Inclusive Approaches in Education. A Challenge and a Vision” (UNESCO, 2003):

Inclusion is seen as a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and communities, and reducing exclusion within and from education (Booth, 1996). It involves changes and modifications in content, approaches, structures and strategies, with a common vision which covers all children of the appropriate age range and a conviction that it is the responsibility of the regular system to educate all children (UNESCO, 1994). (UNESCO, 2003, p. 12)

Through the Flagship, UNESCO hoped to assist governments in developing national goals for EFA that address inclusive education. UNESCO has also produced material for training teachers and administrators in inclusive education, such as the UNESCO/Bangkok Toolkit, which is intended to build professional capacity in pedagogical practice and inclusion (UNESCO, 2004).

Internationally, educational opportunities for students with special needs have often been limited to special schools or institutions where students are completely separated from their average peers, and in some cases their own families, if they receive any education at all. While some individual children may have needs that are unlikely to be met in a regular school, many could have their needs met by an effective inclusive education, but in some countries inclusive education is not even an option and the number of children whose education is relegated to a non-inclusive setting depends greatly on the will of the nation to support inclusive education (Evans et al., 2011). Ebersold and Evans (2008) compared the placements of children with medically diagnosed disabilities across various nations, and found diverse placement options, from primarily special schools in Belgium, to separate classes in regular schools in the US, to more inclusive regular classes in Canada and Spain. Their data did not include data from many developing countries.

It is important to note that a system which educates all children together is not only less costly than one that relies on separate placements, but an inclusive system where students are integrated with their same age peers also provides the best social foundation for an inclusive society, in accordance with the goals of the Salamanca Framework (UNESCO, 1994a). An inclusive system must also address the individual educational needs of all students if it is to be successful. Simply placing students in regular classes is not enough to guarantee that their educational needs are met. For this reason the legislation in the United States requires “individualized education” to meet the needs of the child in the “least restrictive environment” (Education for All Handicapped Children Act, 1975).

Current State of Education for Children with Disabilities in Developing Nations

“Disability is a development issue . . . disability may increase the risk of poverty, and poverty may increase the risk of disability” (WHO, 2011, p 10). The previous quote summarizes the ideas of Amartya Sen (2009) in his *Idea of Justice*, explaining that the role of disability is often underestimated when discussing deprivation in the world. Sen cites the World Bank in his calculation that the majority of people with disabilities live in the developing world. “Disability and Poverty in Developing Countries: A Multidimensional Study” by Mitra, Posarac and Vick (2008) investigated data from 15 countries and found that disability was significantly associated with poverty, and theorized that poverty may lead to disability due to deprivations of poverty including malnutrition, and lack of access to sanitation and health care. This study also found that adults with disability had lower educational achievement and lower employment, similar to the findings across 14 countries by Filmer (2008) and providing support for the ideas of Sen (2009) above. However, there is significantly more data available about children with disabilities in developed nations than in developing nations. The Organization for Economic Co-Operation and Development (OECD) investigated the policies and statistics for its member countries in great depth in the report *Students with Disabilities, Learning Difficulties and Disadvantages: Policies Statistics and Indicators* (OECD, 2007a). This report includes much of the research by Ebersold and Evans (2008) regarding categorization of children with disabilities, and the methods of delivering educational services to those children in 17 OECD countries and one non-member country, Chile. However this information is not representative of the situation in most of the less developed nations. The OECD published a similar study with data from 21 of the member countries of the Organization of American States (OECD, 2007b). This report included new data from Belize, Bolivia, Brazil, Colombia,

Guatemala, Haiti, Nicaragua, Paraguay, Peru and Uruguay, as well as Canada, Chile, Mexico and the United States, which had been included in the first report. El Salvador is not included in the report. While the report shows that all nations had some policy or law which addressed educational provisions for children with disabilities, the quantitative data revealed the probability of limited access for many of these students.

First, in most cases the countries focused on in this report serve relatively fewer students with disabilities than would be expected from comparisons with OECD countries and the OECD medians. Given that most of these countries do not provide education for all children, these differences probably indicate that there are a substantial number of students with disabilities who are unidentified either in school or out of school. (OECD, 2007b, p.67)

Furthermore, countries such as Chile and Uruguay placed a very high percentage of students with disabilities in special schools rather than including them with their same aged peers in regular local schools. The OECD reported that the barriers to equity and inclusive education were usually related to the recent nature of the concept of inclusion in the national education systems. In many developing countries neither special classes nor special schools are readily available, especially outside of urban centers, and local schools are rarely inclusive nor do they offer necessary accommodations. Barriers include the limited physical accessibility of schools (both location and actual classrooms); the lack of extra resources (both human and equipment) needed to include children with special needs, and the attitudes of teachers and community. Filmer (2008) examined household studies from 14 developing countries and found that children with

disabilities were significantly less likely to be enrolled in school. Filmer found that, “The order of magnitude of the school participation disability deficit is often larger than those associated with other characteristics such as gender, rural residence, or economic status differentials” (p.15). A correlation was found between poverty and disability, which the author attributed to poor educational opportunities.

If we are to achieve education for all, students with special needs must not be excluded from education systems. The challenge of this task is to find resources to meet those special needs, and to change attitudes and expectations regarding these students. Inclusive schools are the best solution to both of these issues. The barriers are not insignificant but there are lessons to be learned from successes in both developed and developing countries. The importance of attitudes was highlighted by the United Nations in the text of the Convention on the Rights of Persons with Disabilities, which established that “disability results from the interaction between persons with impairments and attitudinal and environmental barriers that hinder their full and effective participation in society on an equal basis with others” (United Nation, 2006). Developing countries must face the issue of negative attitudes regarding disabilities. Schools cannot be inclusive until both teachers and parents fully appreciate the advantages of inclusion. Attitudes which undervalue children with disabilities hinder their potential and limit their opportunities.

Education in El Salvador

UNESCO’s 2012 Education for All (EFA) Global Monitoring Report revealed that El Salvador’s net intake rate, or the percent of expected age appropriate children entering primary school (seven years old in El Salvador), was 62% in 2010. This means

a large number of children are not entering primary school or are entering years later than expected. The net cohort completion rate for primary school, measuring how many of children who have access to primary school and do enter the system successfully complete the six-year cycle in El Salvador, was 81% in 2009 (UNESCO, 2012).

While the net enrollment rate for primary education, or the percent of appropriate aged students actually enrolled in primary school, rose from 84% in 1999 to 94% in 2010, El Salvador did not reach the EFA goals for 2015 and was placed in the middle group of countries by UNESCO, with an Educational Development Index (EDI) of .913, where 1.0 would indicate full completion of the goals. El Salvador ranked 77th out of 120 countries with sufficient data to calculate the EDI. El Salvador's score of .769 on the Early Childhood Care and Education (ECCE) index, which summarizes the results of early childhood development policies, placed it in the low ECCE group for UNESCO (UNESCO, 2012).

Furthermore, the sixth goal of the EFA framework calls for each country "improving all aspects of the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills" (UNESCO, 2000, p. 8). This movement to compare achievement of measurable learning outcomes has brought international tests for comparison of countries. Altinok (2012) reviewed and analyzed the data from various international assessments in order to compare the students of different countries on a rough common scale of learning for a background paper before the UNESCO EFA Report in 2012. Altinok's data reports that in 2006 only 60% of students in El Salvador survived to grade six and reached minimum levels expected in mathematics, and only

60% survived to grade four and reached minimum levels expected in reading (Altinok, 2012, p. 38, 40). The data above regarding the EFA goals seems to indicate a limited ability of El Salvador to fulfill goal four of the Sustainable Development Goals, “Ensure inclusive and quality education for all and promote lifelong learning” (United Nations, 2015, p.15).

In 2007 El Salvador participated in the Trends in International Mathematics and Science Study (TIMSS), assessing 4166 students in the 4th and 8th grade from 146 schools. Less than 10% of 4th graders in El Salvador met the TIMSS intermediate benchmarks, which signify that students can apply basic mathematical knowledge in straightforward situations and demonstrate an understanding of whole numbers. El Salvador’s 4th graders’ average score was 330 in 2007, while the TIMSS scale average was 500, and the average score in the United States was 529 (Gonzalez et al., 2008). Within El Salvador, the use of more formalized assessment offers more accountability for student achievement, however “impact on learning outcomes as measured in the national tests (PAES Grade 12 leaving exam and SINEA Grade 3, 6, and 9 assessments) and the regional comparison (SERCE) appears little changed over time” (Gillies, 2010, p. 71). On the Second Regional Comparative and Explanatory Study (SERCE) test in 2006, El Salvador scored significantly below the regional mean (500) in third grade math (483), sixth grade math (472), reading (484) and science (479) (Ganamian, 2009), with 100 points equaling one standard deviation (UNESCO, 2008). El Salvador scored with no significant difference from the mean in third grade reading only, with a score of 496 (Ganamian, 2009). Furthermore the SERCE test revealed significant (.5% confidence level) differences in results for urban and rural schools in El Salvador, with urban schools

scoring higher than rural ones in third grade math by 39.92, third grade reading by 57.29 points, sixth grade math by 44.76 points, sixth grade reading by 54.31 points, and sixth grade science by 41.91 points (Valdez et al., 2008).

Educational achievement in rural areas lags behind that of urban areas probably due to both the lower economic status of people in those areas and the disruption caused by over a decade of armed conflict. The entire educational system of El Salvador was greatly hindered by 12 years of civil war from 1980 to 1992. During the war, areas held by the rebel forces of *Frente Farabundo Martí para la Liberación Nacional* (FMLN) had organized their own schools and literacy circles in order to provide education to children as well as adults, and to promote consciousness among the people in order to support political change. This movement known as “popular education” was developed by Paulo Freire in Brazil and spread across Latin America (Hammond, 1998) in response to lack of access to quality education.

With peace came the movement for reform in education to address the lack of access and equity. One government reform that sought to address problems of access in rural areas began in 1991 with a program called *Educación con Participación de la Comunidad* (Education with Participation of the Community), or EDUCO. The EDUCO program provided a way for the government to expand its reach into communities connected to the insurgency by contracting the local leadership to organize and provide education under the government. With EDUCO, groups of parents were organized in Community Education Associations to manage schools financed by the state (Cuellar-Marchelli, 2003).

While enrollment in primary education has increased dramatically since the end

of the war, the unequal quality of education in El Salvador is still a concern, with students in rural schools, both EDUCO and traditional schools, scoring very low in national testing (Gillies, Crouch, & Flórez, 2010). This trend is supported by the SERCE data on score differences for rural and urban areas presented above.

The Ministry of Education of El Salvador reports a national rate of illiteracy of 14.1% but reports that the literacy rates for rural areas are over 7% lower than for urban areas (MINED 2009b, p.9). The Ministry calculates that the rural population, on average, achieves half the years of schooling that the urban population does, with an average of four years for the rural population, compared to eight for the urban population. The rate of repetition for rural students is 15%, compared to 10% for urban students (MINED 2009b, p. 9). When examining this data it should be noted that 52% of primary schools in El Salvador are located in rural areas of the country (MINED, 2011).

Students with Disabilities. The important questions remain, who are the students who are not completing primary school, and why? Internationally “children with disabilities are less likely to start school and have lower rates of staying and being promoted in schools (Evans et al., 2011, p. 206). In her dissertation, Hernandez (2006) investigated the capacity of El Salvador to educate children with disabilities. The author noted that poor quality of primary education in general was a barrier to providing for children with disabilities, specifically lack of adequate teacher training and high pupil teacher ratios. In a paper for Inter-American Development Bank, Porter (2001) reported that less than one percent of students with disabilities in El Salvador have access to education. Hernandez determined in 2006 that few opportunities existed for specialized instruction of children with special needs in El Salvador, with only 30 special education

schools for students with low-incidence disabilities existing in the country, mainly located in departmental capitals, causing special difficulty for students in rural areas to access the schools (Hernandez, 2006). That number was confirmed in 2009 by the Ministry of Education in the “*Política de Educación Inclusiva para todas y todos,*” where they also list only 639 *Aulas de Apoyo*, or special rooms to provide support for students with academic difficulties (MINED, 2009b), out of the 6095 schools in El Salvador at that time (MINED, 2011).

In 2000 El Salvador passed an equal opportunities law for persons with disabilities (Asamblea Legislativa, Republica de El Salvador, 2000) which said that persons with disabilities should be integrated into the education system with appropriate support. The Ministry of Education’s publication of the document “*Política de Educación Inclusiva para todas y todos,*” (MINED, 2009b) or a “Policy of Inclusive Education for All,” established the government’s intent to meet the educational needs of children with disabilities in regular schools. The Ministry of Education has put its focus on inclusive education, listing 2805 *Centros Educativos Integradores*, where children with disabilities should receive their education in the same schools and classes as all other students from their area (MINED, 2009b), following the international recommendations for inclusive education (Evans et al., 2011). However, only 5.4% of all students receiving special education services live in rural areas while 46.7% of all students in El Salvador live in rural areas (MINED, 2011) highlighting the need to expand services to meet the needs of these children in the rural areas. In 2011 there were 2979 students receiving special education services at all levels out of a student population of 1,730,041, or 0.2% of all students (MINED, 2011). The estimated percentage of

children in the world, aged 0-14, with moderate and severe disabilities is 5.8% (Albrecht et al., 2011). This estimate of disability, however, would not include those in the population who have specific learning problems which may require special educational services but do not qualify as moderate or severe disabilities. In the United States, by comparison, 13.1% of students in public schools in 2010 received special education services for some type of disability (US Dept. of Education, 2012). While this study must consider the local understanding of disability and not be constrained by a North American perspective the international ideas of disability as defined by the World Health Organization in the ICD-10 (WHO, 1992) classification of mental and behavioral disorders, does include mild disabilities which would affect a child's learning of language and math. Therefore, this study sought to examine the education of children across the spectrum of disability recognized by international authorities.

In March of 2009, Mauricio Funes became the first candidate of the FMLN party to win the presidential election in El Salvador (CIA, 2013). This dramatic political change saw the rebel party of the civil war take leadership of the national government for the first time, 17 years after the end of the war. Funes sought to answer the educational challenges of El Salvador with a new plan, *Programa Social Educativo 2009–2014* “*Vamos a la Escuela.*” This plan names inclusive education as one of its goals so that 100% of children with special needs will be incorporated in the education system (MINED, 2009a). In 2005 under the ARENA party, El Salvador's government had addressed children with disabilities in the *2021 National Plan for Education*, calling for increased funding per student per year from \$13 to \$50, however Hernandez found confusion between local administrators and Ministry of Education officials about the

current level of support. She noted that the plan allocated very little funding, 0.6% of the national education budget, for *Todos Iguales*, the most important program supporting children with disabilities, and no specific educational outcomes or goals were enumerated in the plan (Hernandez, 2006). While the FMLN party has increased El Salvador's expenditure on education as percent of GNP from 2.4% under ARENA in 1999 to 3.3% in 2010, El Salvador's expenditure is still lower than the average for Latin America, 4.5%, and lower than the average for developing countries in the world, 4.7% (UNESCO, 2012). There is still a clear need for improved educational opportunities for students diagnosed with disabilities as well as those struggling academically due to undiagnosed learning issues, especially those in rural areas where all the data points to the most weakness.

Influence of Teacher Attitudes

The importance of teachers in the development and implementation of inclusive education has been established by various researchers around the world (Booth & Ainscow, 2002; de Boer, Pijl & Minnaert, 2011; Meijer, Pijl, & Hegarty, 1994; Norwich, 1994). The education chapter of the World Health Organization's *World Report on Disability* named negative attitudes as a major obstacle to education for children with disabilities, and noted the importance of attitudes of teachers and administrators on inclusion of children with disabilities in schools (Evans et al., 2011). Clark and Peterson (1986) stated that "Teachers do have theories and belief systems that influence their perceptions, plans, and actions" (p. 292) and that "teachers' mental constructs can have significant pedagogical consequences" (p. 256). They devised a model which illustrates how teachers' thought processes both affect and are affected by teachers' actions and

their observable effects. Their model portrays teachers' beliefs, planning and interactive decisions as "Teachers' Thought Processes" which are connected to "Teachers' Actions and their Observable Effects," including teachers' classroom behavior, students' classroom behavior and student achievement. Both components of the model are affected by "Constraints and Opportunities," including policy and curriculum, as well as each other (Clark & Peterson, 1986). This model has been used by other researchers when investigating inclusion, as seen in Odom (2002) when discussing teachers' beliefs in inclusive preschool programs, and Lieber et al. (2000) which named personnel, including teachers, as the strongest facilitators of inclusion.

Scruggs and Mastropieri (1996) emphasized the importance of the general education teachers being receptive to and realizing the principles and demands of inclusion, and noted a positive correlation in some studies between positive attitudes and extended training on inclusion. They also found that classroom teachers showed less positive opinions toward inclusion than administrators and university professors who have less personal responsibility for implementing inclusion. Avramidis and Norwich (2002) based their review of international literature regarding teachers and inclusion on the idea that "teachers' beliefs and attitudes are critical in ensuring the success of inclusive practices since teachers' acceptance of the policy of inclusion is likely to affect their commitment to implementing it (Norwich 1994)" (Avramidis & Norwich 2002, p. 130). Deng (2008) investigated the attitudes toward inclusive education of primary school teachers from rural and urban areas in China, and found that rural and urban teachers held significantly different attitudes toward inclusion.

I investigated the attitudes of teachers in El Salvador, as the Ministry of Education moves forward in the plan to make El Salvador's schools more inclusive. The teachers' effectiveness in implementing inclusion could depend on their beliefs about and attitudes toward disability, inclusion and student achievement. In 2005 a thesis was produced by undergraduate students at *La Universidad de Centro America*, which surveyed teachers on their attitudes toward inclusive education; however the entire sample of teachers were inside the capital city area (Figueroa, Martínez, & Rosales, 2005). Based on the findings of Deng (2008) it is important to examine the attitudes of teachers from rural areas as well as those from the urban region, if inclusion is to be brought to the national level in El Salvador, under the current plans of the Ministry of Education.

Theoretical Framework

“Development is defined as the person's evolving conception of the ecological environment, and his relationship to it, as well as the person's growing capacity to discover, sustain, or alter its properties” (Bronfenbrenner 1979, p. 9). The desired outcome of quality education for all children of El Salvador depends on the successful guidance of this development. Bronfenbrenner's (1979, 2005) Bioecological Systems theory explains influences on human development as part of a nested series of environments or ecological systems which interact with and affect one another. These systems are defined below.

- The Microsystem is the inner level of the model, including the relations experienced by the developing person in a particular setting or settings. Most individuals participate in multiple Microsystems, such as the classroom and the family.

- The Mesosystem involves the interrelations between two or more Microsystems, for example between a child's family and school.
- The Exosystem is a setting that does not directly involve the developing person, but which affects other settings in which the person participates. The policies of a particular school and local education policy are examples of Exosystems which can affect the Microsystem of the classroom.
- The Macrosystem includes larger social, political and cultural aspects of the society in which the child lives, like the society's cultural perspectives on education and on disability, which affect and define all of the inner systems.
- The Chronosystem refers to changes in the various systems over time, demonstrating that neither individuals nor the systems in which they live remain stagnant, but change and evolve over the life of the individual (Bronfenbrenner, 2005).

The classroom in which the students are developing with their teachers is the microsystem at the center of any effort to understand worldwide implementation of inclusion. As El Salvador's education system evolves toward inclusion, the development of the teacher is equally important to examine as that of the child, as the teacher's actions and thought processes in the classroom will have great effect on the development of the children in that room. Research is needed to look not only at what affects development of the student in the microsystem of the classroom, but also at the development of teachers and how their attitudes are related to changes and developments in the exosystem and the macrosystem of the society of El Salvador.

Every classroom in El Salvador is influenced by the exosystem of the policies and plans of the Ministry of Education (MINED). The actions MINED, from the theoretical aspirations of the “*Vamos a la Escuela*” plan to the individual results of funding allowances, affect the workings of each classroom. The local administrators, from principals to MINED representatives, make daily decisions that affect every school and teacher and therefore affect each classroom. The Ministry of Education’s policies and rules about the school system and about inclusive education are an important exosystem which affect the teacher attitudes and their activity in the microsystem of the classroom.

Teacher attitudes as well as educational expectations for children with disabilities are also a direct product of the macrosystem that is El Salvador’s national outlook on disability and on education. The cultural expectations of students and teachers, and the expected role of individuals with disabilities in society, greatly influence both the classroom expectations of teachers and the daily interactions among students in classrooms.

The investigation of background variables related to teachers, such as their educational experience and previous training in inclusive education is in part an examination of the macrosystem, as these variables are greatly affected by the national opinions and cultural definitions of disability, which influence the training and expectations of teachers. The chronosystem explains how the other aspects change over time. This is specifically important when examining policy changes at the national level, as well as the relationship between teacher attitudes and years of experience teaching. A correlation between teacher attitudes and teachers’ years of experience may show how teachers’ attitudes have changed based on years in the classroom, or may also show how

attitudes vary depending on differences in the initial training that teachers received. Developments in the exosystem or macrosystem have affected this variable of teacher attitude and therefore the development of children in their classrooms.

Bronfenbrenner's Bioecological model provides special emphasis on not only individual children and their process of development, but also on the environments in which they exist. Bronfenbrenner's framework establishes the dual importance of the child's individual biological nature as well as the importance of interaction between the multiple systems or environments which affect the child's development. This framework highlights the importance of examining teacher attitude, and how it influences the microsystem of the inclusive classroom, as well as those variables which may affect teacher attitude and explain the ways in which the exosystem and macrosystem affect the environment inside the classroom where the child is expected to learn, grow and develop.

Problem and Purpose

El Salvador currently does not meet the educational needs of all its children and did not meet all of the EFA goals in 2015 (UNESCO, 2015). The goal of an inclusive education system where all schools meet the needs of local children beside their peers has been established by countries around the world. The fourth Sustainable Development Goal calls for quality inclusive education (United Nations, 2015). In order to meet that goal, the services provided to students with special educational needs must be addressed. The Ministry of Education of El Salvador has promoted its intention to make the education system more inclusive (MINED 2009b). As the government of El Salvador seeks to advance toward a more inclusive educational system which meets the diverse need of learners across the country and reaches international expectations of quality, the

facilitators and barriers to inclusive education must be considered. Research has emphasized the importance of teachers' attitudes for the implementation of an inclusive education system. The attitudes of teachers toward inclusion must be investigated in El Salvador, especially in the rural areas where almost half of all students live, to better understand their knowledge and beliefs regarding disability and inclusion, in order to provide for better planning of this transitional process. The purpose of this research is to directly explore the attitudes of rural teachers in El Salvador toward inclusion of children with disabilities in their own schools.

Research Questions

Through a mixed methods case study of rural schools in one municipality I investigated the following questions:

1. How are children with disabilities receiving education services in El Salvador today?
2. What are the teachers' attitudes toward inclusion of children with disabilities in regular classes?
 - a. What do teachers believe are the facilitators of or barriers to inclusion?
 - b. What do teachers believe about classroom management and peer interaction in an inclusive classroom?
 - c. How do teachers perceive their ability to teach children with disabilities?

3. How are the teachers' attitudes toward inclusive education for children with disabilities related to the severity of the disability?
4. How have teachers been trained for implementation of the inclusive policy of the Ministry of Education?
 - a. How are the teachers' attitudes toward inclusive education influenced by training and or experiences they have had?

Significance

The Education for All goals set by UNESCO, established the need for special attention for learners with disabilities (UNESCO, 1990). The World Conference on Special Needs Education published the Salamanca Framework, which highlighted the lack of access for children with disabilities across the world and called for inclusive education systems (UNESCO, 1994a). The attitudes of teachers have been found to be an important part of an inclusive system (Avramidis & Norwich 2002, Scruggs & Mastropieri, 1996). The Ministry of Education of El Salvador currently has a policy of inclusive education to meet the educational needs of children with disabilities in regular schools (MINED, 2009b).

Investigating the knowledge and beliefs of teachers in rural El Salvador related to disability and inclusive education will begin to connect the international literature to the specific populations of Central America, which are not well researched and who struggle to achieve international expectations for access to and quality of education. Furthermore

this study will particularly emphasize the situation of children and teachers in rural El Salvador, who are removed from the policy makers of the nation's capital and suffer from lack of attention and resources compared to those available in urban centers. Better understanding the teachers' beliefs and knowledge will help to inform national policy makers and improve the planning for a more equal and adequate inclusive education system.

Chapter II

Literature Review

While integration may be imposed by binding laws, the manner in which the regular-classroom teacher responds to the needs of the special child may be a far more potent variable in determining the success of mainstreaming than is any administrative or curricular scheme. (Larrivee & Cook 1979, p. 316)

As countries around the world move to make all schools more inclusive of children with diverse special learning needs, the role of the teacher remains the most important factor in any equation for success. In order to meet the fourth Sustainable Development Goal, to ensure inclusive quality education for all, teachers in schools around the world must be ready to meet the needs of students with different abilities. “It is argued that teachers’ beliefs and attitudes are critical in ensuring the success of inclusive practices since teachers’ acceptance of the policy of inclusion is likely to affect their commitment to implementing it (Norwich, 1994)” (Avramindis & Norwich, 2002). Therefore, the attitude of teachers toward inclusion is an important factor to be investigated and understood in order to realize the goals of education for all.

In this chapter, I first describe the search methods used and my selection of studies. After providing some basic definition of terms, I then discuss an early study of teacher attitudes toward inclusion, conducted across the globe in 1986 for UNESCO. From this starting point I begin to build a background by summarizing four prominent reviews of the literature which establish the history and development of teacher attitudes in the movement of inclusion. I then analyze 22 studies from 19 countries published in

the last 10 years, including one university thesis from El Salvador, which have examined teacher attitudes toward inclusion, and summarize the common themes revealed in this body of literature.

Selection of studies

After learning that El Salvador's Ministry of Education has the intention to expand inclusive education across the country, (MINED, 2009b) I conducted a hand search of the *International Journal of Inclusive Education* and found the article "Regular Primary Schoolteachers' Attitudes Towards Inclusive Education: a Review of the Literature" by de Boer, Pijl, and Minnaert (2011). I decided that teacher attitude should be investigated as a key factor in the implementation of inclusive education in El Salvador. I found the articles reviewed by de Boer from the last 10 years, which focused on primary teacher attitudes toward inclusion, and searched for other more recent articles by placing "inclusion" or "inclusive education", and "teacher attitudes" in the ERIC database. Many studies found in this search, especially those from the United States, related to pre-service teachers, and these were eliminated in order to focus on attitudes of current primary school teachers. When I placed "Latin America," Central America" or "El Salvador" in the search along with these terms, no articles were found, demonstrating the absence of published research in this specific field in this geographic area. In the PsycInfo database, I searched with the terms "inclusive education," and "teacher attitudes" and found two recent articles. I also searched for articles in Spanish by using Redalyc.org using the words "*inclusión*" "*actitud*" and "*maestro*" and found two articles from the last decade. A thesis from *La Universidad de Centro America* was provided to me by a professor from that university in San Salvador, with whom I had met and

discussed my research. Several previous reviews of the literature, as well as the early UNESCO study, were cited in multiple articles found and are summarized below. In total I analyzed 22 studies from the last 10 years which have been conducted around the world, investigating the attitudes of teachers toward inclusion of children with special educational needs in regular classrooms.

Definitions

To investigate the educational needs of children from various cultures in countries around the world, it is important to define some terms that will be used in this paper. In the Salamanca Statement, UNESCO defined “Special Educational Needs,” often abbreviated “SEN” in the literature, as “all those children and youth whose needs arise from disabilities or learning difficulties” (UNESCO, 1994a, p. 6). The World Health Organization established that “disability” is “the umbrella term for impairments, activity limitations and participation restrictions, referring to the negative aspects of the interaction between an individual (with a health condition) and that individual’s contextual factors (environmental and personal factors)” (Bickenbach, et al. 2011, p. 4).

The international community has committed to providing equal access and quality of education to all children regardless of their different abilities and needs, with a focus on including children with disabilities in all schools. “Integration” refers to the idea that children with disabilities “should be educated alongside their peers in mainstream schools” (Pijl & Dyson, 1998, p. 261). Pijl and Dyson (1998) go on to explain that the term “inclusion” “marks a shift from the notion that pupils with special educational needs should be placed in mainstream schools *where possible* to the belief that they should be educated in mainstream schools *as of [sic] right*” (p. 262). Currently the term UNESCO

uses for the ideal manner of providing education to children with disabilities is “inclusion,” which was explained in the Salamanca Statement: “The fundamental principle of the inclusive school is that all children should learn together, wherever possible, regardless of any difficulties or differences they may have” (UNESCO, 1994a). UNESCO uses the term “inclusion” more broadly, to include providing education for “gifted children, street and working children, children from remote or nomadic populations, children from linguistic, ethnic or cultural minorities and children from other disadvantaged or marginalized areas or groups” (UNESCO, 2003, p.4). This paper, however, will use the term in the way it is understood in the United States and focus specifically on the inclusion of children with disabilities.

Dupoux, Hammond, Ingalls and Wolman (2006) explained that although “inclusion” is the preferred term in the England and the United States, “integration” is used in many places in the world and teachers often do not distinguish between these terms. Starczewska, Hodkinson, and Adams (2012) support this theory, concluding that teachers in Poland did not distinguish the meaning of the two terms. Furthermore, UNESCO uses the Spanish word “*integración*” as the translation for “inclusion” in the Spanish version of the Salamanca Statement (UNESCO, 1994b). The slight difference in philosophical underpinnings of the terms “integration” and “inclusion” will not be examined in this paper, as the wide variance in understanding across languages and cultures obscures the fact that both terms are often used interchangeably in the international literature to refer to the same goal. Therefore studies which have used both of these terms will be analyzed together as integral parts of the movement to provide equitable quality education for children around the world in their local schools.

Finally, as this paper is concerned with teachers' attitudes toward inclusion, the term "attitude" will be used to refer to a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor (Eagley & Chaiken, 1993).

Early Study on Inclusion across the World

Prior to describing the major literature reviews that synthesize this literature from a historical perspective, it is important to review the work of Bowman (1986) because of its particular relevance to this topic. Bowman conducted a study for UNESCO in which teachers from 14 countries were surveyed regarding policy and practice in their countries and teacher training and views toward including children with disabilities in their classrooms. This study provides a basis for understanding the history of policy and practices in many countries across the world: Egypt, Jordan, Colombia, Mexico, Venezuela, Botswana, Senegal, Zambia, Australia, Thailand, Czechoslovakia, Italy, Norway and Portugal. The survey was administered to 100 primary and secondary teachers from each country, equally distributed between urban and rural areas.

Although this study is dated, several findings remain important to understanding the progress countries have made and are still moving through to provide equitable quality and access to education for all children. The author states that: "Between 67 and 90% of the teacher sample reported having pupils with handicaps in their ordinary school classrooms" (p. 34), presumably giving a range for the different countries studied. Teachers saw children with medical and physical conditions as easiest to include in the classroom. About half of the teachers thought that children with "speech defects" and with "specific learning difficulties" could learn in regular classes (p.34). Only one third

of teachers thought that children with severe emotional and behavioral difficulties or those with “moderate mental handicap” could be taught in regular classes. One quarter of the teachers thought that children with sensory disabilities could be included, and less than 10% believed that children with “severe mental handicap” or multiple handicaps could be included in regular classes. When asked which factors were most important to help teachers teach children with special needs, 93% of teachers named “training in individual teaching method” and “smaller classes” as important, 90% rated “help and advice for parents,” 89% rated special equipment and 88% rated “support from education advisers” important (p.36).

According to Bowman’s investigation, the majority of teachers in 1986 were not ready for inclusion of children with disabilities in their classrooms. Teachers from around the world felt a need for more training in working with children with special needs, and preferred smaller classes when working with diverse student needs. Teachers’ opinions about inclusion of children with disabilities in regular classes depended on the types of disability, with more severe disabilities seen as less favorable for inclusion. This study provides an important introduction to the topic of teacher attitude toward inclusion around the world, however this short summary of results from many different countries has little space for individual details, and the extended time since these surveys leaves a great need for new investigations.

Background Literature Reviews

Some findings from Bowman’s study have recurred in the nearly 30 years of subsequent research. To provide background for current understanding on the attitudes

of teachers toward inclusion, I summarize four important reviews of the literature on this topic, covering the important past research. I highlight findings from Scruggs and Mastropieri (1996), Avramidis and Norwich (2002), Odom et al. (2004) and de Boer, Pijl and Minnaert (2011), and then analyze studies of regular education primary school teachers published in the last 10 years from around the world, with emphasis on developing countries and Latin America when found.

Teacher Perceptions of Mainstreaming/Inclusion, 1958 –1995: A Research Synthesis, compiled by Scruggs and Mastropieri (1996) synthesized the results of 28 studies from across the United States, as well as from Australia and Canada, for a type of meta-analysis over a long period which covered many developments in the field of inclusion and services for children with disabilities. These studies involved 1173 special education teachers and 6459 general education teachers from both primary and secondary schools. Scruggs and Mastropieri synthesized the data from these studies to calculate percentages of teachers who agreed with various statements that reflected their attitudes about inclusion. In some cases these statements were represented in the surveys as individual questions. In other cases the authors aggregated data of multiple questions on a survey related to a single concept. In cases where percentages were not given in the original studies, the authors estimated percentages from means, and standard deviations which were provided. Across the surveys, 4801 teachers, or 65%, indicated support of the concept of mainstreaming or inclusion. Teachers' support for inclusion varied depending on the severity of the disability, with the majority of teachers supporting inclusion of students with mild physical or sensory disabilities. However, fewer supported the inclusion of students with severe sensory, intellectual, or behavioral

disabilities. Teachers were asked in nine of the surveys whether they were willing to teach students with disabilities in their classes, and 53.4% expressed such willingness. This is a slightly smaller percentage than those who indicated support for the concept of inclusion across the surveys. Overall the teachers' willingness to teach students with disabilities varied with the severity of disability in question. The authors note that several studies provided similar results to a study by Haring, Stern and Cruickshank (1958), in which 85.2% of teachers agreed they could "handle" a student with mild sensory, physical, or learning problems, but only 38.0% said the same for a student with moderate to severe physical or intellectual disabilities.

Across 15 of the surveys, 54.4% of the teachers agreed with general statements that students with and without disabilities could benefit from inclusion. Special education teachers agreed more frequently than general education teachers that inclusion provided benefits. In surveys where teachers were asked if students with disabilities would disrupt or have a negative effect on the classroom, a substantial number, 30.3%, indicated that they would. Across studies which asked teachers if they had sufficient time to undertake responsibilities of inclusion, the majority indicated that they did not have enough time. In 10 studies conducted in the United States between 1975 and 1994, teachers were asked if they had adequate training for inclusion, and only 29.2% agreed that they had sufficient expertise or training. In five surveys where elementary teachers were identified, 36.9% agreed that they had sufficient skills for inclusion. The authors highlight the study by Hudson et al. (1979) which found that 68% of teachers agreed that training would "aid" them in teaching children with special needs.

In surveys which asked if teachers had sufficient resources, less than half of the teachers agreed that sufficient resources were available to support inclusion. More agreed that they had adequate material support than agreed that they had adequate personnel support. In three investigations, teachers were asked how many students should be in classes which included students with disabilities, and 71.2% agreed that class size should be reduced.

In summary, Scruggs and Mastropieri found that the majority of teachers agreed with the concept of inclusion, but only a very slight majority expressed willingness to implement it in their classes. A substantial minority expressed the belief that students with disabilities would be disruptive. Less than a third felt that they had sufficient time, training and resources to successfully implement inclusion. In some studies teachers appeared to become more positive after training.

Similar conclusions were reached by Avramidis and Norwich (2002) when they reviewed literature from around the world related to teachers' attitudes towards inclusion of children with disabilities in mainstream settings. They considered studies which used both the terms "integration" and "inclusion," where "integration" implies merely placing students with disabilities in regular schools to facilitate interaction with others students, and "inclusion" implies mainstream schooling being restructured so that all learners belong to the community equally. They note that the term "inclusion" has become more popular and reflects the more current values presented by UNESCO since the Salamanca Declaration of 1994.

In this review, the authors found teachers were positive toward the general philosophy of inclusive education, though they did not subscribe to a 'total inclusion' approach to providing education for all children with special needs. They held different attitudes toward placement "based largely upon the nature of the students' disabilities" (p.142). For "severe learning needs and behavioral difficulties" (p.142) more teachers held negative attitudes toward inclusion.

No teacher-related variables, such as age, education level, years of experience, were consistently found across the studies to be strong predictors of teachers' attitudes toward inclusion. However educational environment-related variables did relate to attitudes. The availability of support services, "both physical (resources, teaching materials, IT equipment, a restructured physical environment, etc.) and human (learning support assistants, special teachers, speech therapists, etc.)" (p.140) were consistently found to be associated with more positive attitudes. The authors concluded that "with the provision of more resources and support, teachers' attitudes could become more positive" (p.142).

Avramidis and Norwich reviewed one study that was conducted by Stephens and Braun (1980). The authors found no correlation between teacher contact with students with significant disabilities and attitudes toward inclusion. Similarly, they reviewed another study by Forlin (1995) which showed that teachers involved with inclusion reported increased stress when working with a child with special needs, while teachers not involved with inclusion believed the stress of working with a child with disabilities would be equal to working with a mainstream child. However, the authors identified multiples studies which found that contact with children with disabilities correlated with

more positive attitudes toward inclusion (Harvey, 1985; Janney et al., 1995; Leyser et al., 1994; Shimman, 1990; Stainback, Stainback & Dedrick, 1984). In this review, training, both pre-service and in-service, was found in multiple studies (Avramidis et al., 2000; Buell et al., 1999; Center & Ward, 1987; Van-Reusen, Shoho & Barker, 2000) to be related to less resistance to inclusion. In one study, Dickens-Smith (1995) gave a survey to teachers before and after a staff development program and found a positive attitude change after the training. These findings prompted the authors to conclude that “extensive opportunities for training at the pre- and in-service levels should be seen as a top priority for the policy-makers” (p.142).

In summary, in this review Avramidis and Norwich (2002) established that teachers’ attitudes toward inclusion often declined as severity of disability increased. However, overall attitudes increased with support in both materials and personnel, as well as with increased training and contact with children with disabilities.

More recently in the United States, Odom et al. (2004) reviewed research on preschool inclusion. Unlike previous reviews, these authors concluded from their review that teachers had “overwhelmingly positive attitudes toward inclusion” (p.32) and saw benefits for typical children as well as those with disabilities. However, similar to other reviews, teachers were less willing to include children with more significant disabilities than children with mild disabilities. More positive attitudes were seen in teachers with more experience in inclusion. Teachers felt that “support from their administrators, resources (i.e., time, personnel), and training” (p.32) were needed for successful inclusion.

The authors noted that in the United States, preschool inclusion differs from primary education in setting, curriculum, developmental differences and testing pressure. These differences may explain the more positive attitudes toward inclusion found in this review. However, the themes of comfort with inclusion based on severity of disability and the correlation of experience with inclusion or training with more positive attitudes toward inclusion support the similar findings in research with primary school teachers.

In the most recent major review of international literature on attitudes toward inclusion, de Boer, Pijl and Minnaert (2011) reviewed 26 studies from 16 countries, published between 1998 and 2008, focusing on regular primary school teachers' attitudes. Their analysis concluded that teachers hold negative or undecided beliefs about inclusive education, and do not feel competent to teach students with special needs. Teachers with more experience or training in inclusive education had more positive attitudes than those with less experience and training with inclusion. However, they found that teachers with more years of general teaching experience had more negative attitudes toward inclusive education. They discussed this seeming contradiction as possible evidence that teachers with many years of experience teaching may "grow 'stale' in their profession" (p. 348). However, another interpretation may be that direct experience in inclusion may ease fears of the unknown, and therefore may have more impact than general experience in segregated systems. The review also found teachers' attitudes differed according to type of disability. Studies found teachers were more positive toward inclusion of children with physical disabilities or sensory impairments. However, the results showed contradicting patterns toward learning disabilities in different studies. Teachers in a study by Cook (2001) more often chose on a questionnaire to reject students with

learning disabilities, AD/HD or behavioral disorders, while others studies revealed teachers to be more positive to inclusion of those with learning disabilities.

These reviews of the literature highlight several common themes. The importance of training and resources for effective inclusion are evident across each of the earlier reviews, and de Boer et al. (2011) point to the importance of training but does not investigate the effect of resources. Severity of disability was often found to affect the teachers' attitudes or comfort with inclusion. Experience with inclusion or children with disabilities was found to be an important variable positively related to favorable attitudes in the more recent reviews, while Scruggs and Mastropieri (1996) did not examine this variable. The common negative attitudes regarding inclusive education found in these reviews, other than Odom et al. (2004), may reflect that many of the countries studied were in the beginning stages of implementing inclusion.

In the next section I analyze those studies found in de Boer et al. (2011) which were published since 2004, focusing on primary teacher attitudes toward inclusion, as well as other studies published since 2008. While focusing primarily on international studies, I chose to analyze two United States focused studies from de Boer which investigate primary school teachers' attitudes about inclusion. This review is organized by the type of research conducted and what survey instruments were used.

Review of the Current International Literature

In this section I begin by describing several published surveys that have been used across multiple international studies to measure teacher attitude toward inclusion, followed by analysis of the studies which used those instruments. I then discuss those

studies that used self-designed instruments to examine teacher attitude, followed by three mixed-methods studies that used surveys as well as interviews with teachers. Finally I present the results of one study that was purely qualitative, using only interviews.

Quantitative studies

The majority of the international studies that I found, published over the last decade, used self-report surveys that asked teachers to respond to statements for agreement or disagreement on a Likert scale of summed ratings to measure attitudes toward inclusive education. Three instruments, the MTAI, ORM, and ORI, were used by more than one researcher. Other researchers used other published instruments or self-designed surveys with many similarities.

The My Thinking About Inclusion scale (MTAI). Stoiber, Gettinger and Goetz (1998) developed the MTAI scale to explore parents' and early childhood practitioners' beliefs about inclusion. The MTAI Total Scale is composed of 28-items, in three belief subscales and has a Cronbach's alpha for internal consistency of .91. The first subscale includes Core Perspectives (12 items), which covers values and best practices, for example: "Students with special educational needs have the right to be educated in the same classroom as typically developing students" (p. 113). The second is Expected Outcomes (11 items), reflecting what one believes will result from inclusion, for example: "Inclusion is socially advantageous for children with special needs" (p.113). The last is Classroom Practices (5 items), covering how inclusion impacts classroom life, for example: "The behaviors of students with special needs require significantly more teacher-directed attention than those of typically developing children" (p.113).

Teachers respond to statements on a 5-point scale (1 = Strongly Agree, 2 = Agree, 3 = Undecided/ Neutral; 4 = Disagree; and 5 = Strongly Reject) (p.114). Negative statements are reverse scored so a positive attitude toward inclusion results in lower scores on the scale. The score range for the total scale is 28-140, with 84 representing the midpoint between positive and negative.

A second part of the MTAI asks teachers to indicate the ease of accommodating children with twelve different disability types: “Speech and Language Delay, Learning Disability, Mild Cognitive Disability, Moderate Cognitive Disability, ADHD, Visual Impairment, Hearing Impairment, Physical/Motor Impairment, Emotional Disturbance, Challenging Behavior, Brain Injury/Neurological, Autism/PDD” (Stoiber et al., 1998, p. 114) on a four point scale (1 = No or Very Little Accommodation, 2 = Minor Accommodation, 3 = Much Accommodation, 4 = Major Accommodation). The teachers respond regarding their preparedness to teach children with the same 12 disability types in an inclusive classroom (1 = Not Prepared, 2 = Somewhat Prepared, 3 = Very Prepared, 4 = Extremely Prepared). Also teachers are asked to rate the extent to which eight factors (Limited Time, Limited Opportunities for Collaboration, Teacher Attitudes, Lack of Experience Regarding Inclusion, Little Knowledge in this Area, Current Work Commitments, Little Support from School/District, Parent Attitudes), interfered with inclusion practices, from 1 (Does Not) to 4 (Does Extremely), and to rank 10 methods for improving inclusive practices (Direct Teaching Experience with Children with Disabilities; Observation of Other Teachers in Inclusive Settings; In-service Training/Workshops; Consultation Activities with other Teachers, Specialists, and Parents; Exposure to Children with Disabilities; Discussion Groups on Inclusive

Practices; University Coursework; Research Involvement, Collaborative Experiences with University Faculty, Independent Reading) in terms of their usefulness from best (1) to least (10) (p.115).

MTAI Studies. Two of the reviewed studies used the MTAI as the instrument for their investigation. Avramidis and Kalyva (2007) surveyed 155 general education primary teachers from northern Greece with the MTAI to investigate how experience and professional development affected their views on inclusion. They found teachers overall to be slightly positive in their attitude to inclusion with a mean score of 2.84 (or a total 79.52 for 28 items). However on the classroom practices subscale, they found a negative result ($M = 3.76$) indicating teachers' concern for the practical difficulties of running an inclusive classroom. Teachers found students with learning difficulties, speech and language problems, and physical/motor impairments easiest to accommodate, while students with sensory impairments, autism, and brain injury or neurological disorders need the greatest degree of classroom adaptation.

The study divided teachers by experience with inclusion into two groups, those from schools operating "integration units" ($n = 39$) assumed to have "experience accommodating pupils with SEN in their classroom" (p. 381), and those from other schools ($n = 116$), "assumed to possess little or no such experience" (p. 381). The integration units are described as resource rooms which provide services to students outside the regular class for no more than 10 hours per week. This variable had significant effect on attitudes, with teachers from schools with integration units showing more positive means on the whole scale ($M = 2.77$) and under core perspectives ($M = 2.69$) than those from schools without integration units on the whole scale ($M = 2.87$,

$F = 3.89, p < 0.05$) and on core perspectives ($M = 2.92, F(1,153) = 12.33, p < 0.001$).

However, classroom practices and expected outcomes resulted in similar scores for both groups. The provision of support services in a separate “integration unit” does reduce the applicability of these results for teachers in schools where the resources for that separate support in a resource room would not be available.

The level of professional development showed a positive correlation with attitudes under core perspectives (no training $M = 2.91$, short-term $M = 2.85$, long-term $M = 2.64, F(2,152) = 4.85, p < 0.01$) while not producing significantly different results under classroom practices and expected outcomes. An important limitation of this study is that no detail is provided on the actual nature of the training, other than length of time, making it difficult to interpret these results. Such information would be valuable for designing improved training for more teachers.

Another study used the first part of the MTAI, but did not investigate accommodation of different disability types with part two of the survey. Kalyva, Gojkovic and Tsakiris (2007) compared the attitudes of 72 teachers in Serbia, with and without experience working with children with special needs. The first group was not randomly chosen but purposely recruited from the small number of city schools inside Belgrade that accommodate students with special needs or from “special and inclusion schools” (p.32). No specific description is given of these schools or the program which they follow. The second group was made up of teachers without experience teaching children with special needs, who were chosen from other schools in the same areas as the first group, with an effort to match the first group for age, gender and years of experience.

They found that teachers with experience working with students with special needs had a significantly more positive attitude toward inclusion across the three subscales of the MTAI survey, ($F(1, 69) = 69.86, p < 0.001$) (p.34). They claim that teachers from Serbia held “overall negative attitudes towards inclusion irrespective of their years of teaching experience” (p. 34) however the mean score for the MTAI total in this study was 82.21 (a mean for individual prompts of 2.936) on a scale 28 - 140 with higher numbers signifying more negative attitudes. This mean score falls lower than the midpoint, 84, which would be the total score if “undecided” were chosen for every question, and therefore the mean appears to be slightly positive or neutral by my calculations, rather than negative, as reported. The mean for the classroom practices subscale was 18.68 on a range of 5 to 25, which was negative as 15 is the midpoint (p.33). The authors attribute this to lack of support and resources for teachers. The authors note an excellent response rate of 90% for the small yet specific sample of teachers from “inner-city” Belgrade for this study, yet the applicability of these results outside the capital city of this country may be affected by the nature of this sample (p.32).

Summary. Both of these studies reveal overall slightly positive attitudes about inclusion among all teachers, and show the positive effect of experience with inclusion on teachers’ attitudes toward inclusion, but provide very little information regarding the training teachers have received in order to conduct inclusive education. Unfortunately, Kalyva et al. (2007) did not use the second part of the MTAI, and therefore they did not investigate teachers’ comfort with the variety of disability types, ignoring a valuable resource in this survey that is not present in other common instruments used in the studies below.

The Opinions Relative to Mainstream Scale (ORM). Larrivee and Cook (1979) developed the ORM in the United States to assess teachers' attitudes toward inclusion. The ORM measures several factors related to inclusion: general philosophy of mainstreaming (the early term used for placing children with special educational needs in regular classrooms), behavior academic and social growth, and the teacher's ability to teach children with special educational needs. On the ORM, teachers respond to 30 statements for agreement on a five point continuum (1= strongly agree, 2=agree, 3= undecided, 4=disagree, 5=strongly disagree), coded across positive and negative statements so that higher numbers represent more positive attitudes toward inclusion. The ORM total score can range from 30 to 150, with higher numbers revealing a more positive attitude toward inclusion, and 90 being the midpoint equal to choosing "undecided" for every statement.

Examples of the statements included in the ORM survey are: "The challenge of being in a regular classroom will promote the academic growth of the special-needs child; Regular teachers possess a great deal of the expertise necessary to work with special needs students; Special-needs children are likely to create confusion in the regular classroom" (p. 322-323).

ORM studies. Monsen and Frederickson (2004) gave teachers in New Zealand the ORM to assess their attitudes toward inclusion, and the My Class Inventory (MCI) developed by Fraser, et al. (1982) to students to measure their perceptions of their classroom learning environment, in order to investigate the relationship between what teachers think and the environment they provide. Participants were invited from a random sample of public primary and intermediate schools in Auckland, New Zealand.

These authors reported an excellent response rate in that all 67 teachers in the schools returned surveys and only four were incomplete and therefore discarded. The MCI questionnaire, obtained from 1729 of 1903 students in the schools, asked students to agree or disagree with 38 statements related to satisfaction, friction, competitiveness, difficulty and cohesiveness in the classroom. Monsen and Frederickson (2004) claim “Fraser et al. (1982) reported satisfactory internal consistency reliability and discriminant validity for each MCI scale” (p.136), but they do not provide this data.

For analysis, the teachers were divided into three groups, high, medium and low, based on their score on the ORM, with higher scores showing more positive attitudes toward inclusion. Teachers in the high group (above 75th percentile) had a mean score of 116.18 on the ORM, and the medium group (25th to 75th percentile) had a mean score of 98.83, both of which reveal positive attitudes on the ORM scale of 30-150. Teachers in the low group (below the 25th percentile) had a mean score of 77.00, below the midpoint of 90 indicating a negative attitude.

There was no significant difference in the background variables of length of general teaching experience, gender, or contact with people who have disabilities among these three groups of teachers. The study intended to compare teachers who had previous training in special education with those who did not, but only 11% reported that they had taken no special education courses, so statistical analysis was not possible. The authors note that this weakness was unexpected and unlike studies conducted in other countries.

The students in the classes of teachers scoring high on the ORM held positive attitudes toward inclusion and perceived more satisfaction ($F(2, 60) = 4.15, p = 0.020$) and less friction ($F = 2.98, p = .052$) in their classroom on the MCI than did students of

teachers in the two lower groups. While this study provided no conclusions regarding the variables that affect teacher attitudes toward inclusion, it supported the idea that positive attitudes of teachers result in a classroom environment more likely to support academic and social development. The size of classes taught did not correlate with teacher attitude in this study, however the authors note that the limited range of this variable, with class size averages from 26.5 to 28.5 may have limited the results, as the authors note that Villa et al. (1996) found a wider range of class size did affect teacher attitude. No significant difference was found by grade level taught in this study. Most teachers had positive attitudes toward inclusion in New Zealand, but the high level of teacher training points to the question of whether the results would be similar in countries which are in the beginning stages of implementing inclusion.

Ojok and Wormnaes (2012) used the ORM in Uganda. They examined the attitudes and willingness of primary school teachers in rural Uganda to include children specifically with intellectual disabilities in their classroom, using the ORM survey to measure attitudes and a self-designed questionnaire to measure willingness. All teachers in 12 randomly selected schools from a district in northeastern Uganda were given surveys, and 96% or 125 teachers responded.

The self-designed questionnaire asked teachers to respond to statements regarding their determination and ability to teach children with intellectual disabilities in regular classes. In this study, the authors adapted the ORM, changing some terminology (“integration” to “inclusion,” “normal” to “regular,” “students” to “pupils”, and “children with intellectual disabilities” in place of “special needs children”) (p. 6). They also used a four point Likert scale response (1 = strongly agree, 2 = agree, 3 = disagree,

4 = strongly disagree) for both the ORM scale and the willingness scale, with no choice to represent undecided, with higher numbers relating to more positive attitude or willingness toward inclusion.

The overall mean for attitude ($M = 2.27$) appears slightly negative, though the authors describe it as “with a slight tendency toward more positive than negative” (p. 8) and for willingness ($M = 2.73$) was slightly positive. On a four point scale, 2.5 would be the midpoint. The results were a strong positive correlation between attitudes and willingness, ($r = 0.354$, $p = 0.000$) (p.8). No significant differences were found in attitude or willingness by gender, class level taught or class size. Teachers who indicated previous attendance in workshops, seminar or formal qualifications in special needs education had slightly more positive though not significantly different ($p = 0.227$) attitudes ($M = 2.35$) than untrained teachers ($M = 2.26$) and significantly ($p = 0.004$) more willingness ($M = 2.96$) than untrained teachers ($M = 2.66$) (p.10). Teachers with experience teaching students with intellectual disabilities had significantly ($p = 0.025$) more positive attitudes ($M = 2.34$) than those who had never taught students with intellectual disabilities ($M = 2.21$) and slightly significantly ($p = 0.052$) more willingness ($M = 2.82$) than teachers who had not ($M = 2.64$) (p.11). Teachers with a student with intellectual disabilities in their class at the time had slightly ($p = 0.150$) more positive attitudes ($M = 2.33$) than those who did not ($M = 2.26$) and were significantly ($p = 0.019$) more willing ($M = 2.82$) than teachers who did not ($M = 2.73$) (p.11).

This study was very specific in focusing on children with intellectual disabilities in one region of Uganda, which limits our ability to generalize these results to children with other disabilities. However, it provides an important insight into the understudied

field of teacher attitudes in rural communities of developing countries. Unfortunately the self-designed study of willingness is presented without reliability or validity data, and is difficult to compare with other research.

Opinions Relative to Integration of Students with Disabilities (ORI). Antonak and Larrivee (1995) revised the ORM scale and renamed it the Opinions Relative to Integration of Students with Disabilities (ORI). The survey uses the word “integration” for what would be more commonly referred to as “inclusion” today. The new survey covers four factors according to the authors: “Benefits of Integration,” “Integrated Classroom Management,” “Perceived Ability to Teach Students with Disabilities,” and “Special versus Integrated General Education.” In addition to updating the language used in the ORM (i.e. “disability” for “handicapped”), the revision changed the response scale to six points to eliminate the “undecided” option (-3 = I disagree very much, -2 = I disagree pretty much, -1 = I disagree a little; +1 = I agree a little, +2 = I agree pretty much, +3 = I agree very much). Five items from the original ORM were eliminated from the revised ORI, leaving 25 items. The responses were summed and a constant of 75 was added to eliminate negative scores, resulting in a range from 0-150 with higher numbers indicating a more favorable attitude toward inclusion. Using a sample of 433 teachers and university students of education in the United States, a Spearman-Brown value for split-half reliability for the new scale was estimated at 0.82 (Antonak & Larrivee,1995).

ORI Studies. Dupoux, Hammond, Ingalls and Wolman (2006) used the ORI survey to measure the attitudes towards inclusion of 183 elementary and secondary teachers from rural and urban Haiti. No information was given regarding the sampling technique or response rate. The study used a second “background instrument” developed

by the authors to inquire as to teachers' gender, education level, years of experience, number of students with disabilities they had served, categories of disabilities they thought they could accommodate and their perceptions of other teachers' attitudes toward inclusion.

The survey was distributed to elementary and secondary teachers from public and private schools in rural and urban areas. A 72% response rate across the whole sample provided data for 114 urban and 70 rural teachers, but information on the response rate for each group is not provided. Dupoux et al. found similar findings for teachers from rural ($M = 80.19$) and urban ($M = 77.80$) regions, $t(182) = 1.03$, $p = .31$. They did not find a correlation between years of experience teaching and attitudes ($r = .07$, $p = .33$), although they found a positive correlation between educational degree and attitude with teachers with a Master's degree having a more positive attitude toward inclusion ($M = 86.43$) than those with less advanced degrees ($M = 77.60$, $t = 2.63$, $p = .009$). No tables were presented to organize the minimal data provided from the surveys.

Multiple regression analysis was used to establish whether the variables from the background instrument representing teachers' "cognition and beliefs," (instructional tolerance or stated ability to accommodate students with mild to moderate disabilities in four areas: mobility, visual/hearing, learning, emotional disabilities, educational level, and teachers' perceptions of colleague's attitudes), or teaching experience (years of teaching experience, class size, special education or regular teacher, and number of special education students teacher has had in class) affected attitudes more. Little data was given about the multiple regression analysis of the data but the authors report that teaching experience explained only 2.8% of variance in attitudes, $F(4,179) = 1.29$,

$p = .28$, and the “teachers’ cognitions and beliefs” explained only 5.3% $F(3,176) = 3.40$, $p = .02$ (p. 9).

While this study investigates the very pertinent area of teacher attitude in rural as well as urban schools of a developing country in the Americas, the authors do not explain their background instrument clearly and give no data for the validity or reliability of that instrument. Furthermore, the authors’ analysis of those background factors and their effect on teacher attitudes results in their admitting that 90% of variance in teachers’ attitudes remains unexplained.

In Saudi Arabia, Alquraini (2012) used an edited version of the ORI scale to investigate the attitudes toward inclusion of children with severe intellectual disabilities of 303 general education and regular education teachers of 460 selected by principals, in randomly chosen public primary schools in the capital city of Riyadh. They edited the ORI scale to focus on children with severe intellectual disabilities.

The general education teachers showed more positive attitudes towards inclusion ($M = 73.50$) than the special education teachers ($M = 67.29$), deemed significant with ANCOVA ($F(1,296) = 5.183$, $p = 0.024$) after statistically controlling for class size (p.174). The amount of previous training on inclusive education had no significant impact on attitudes, nor did the level of education completed or years of teaching experience. Teachers with larger class sizes had more negative attitudes towards inclusion of students with severe intellectual disabilities ($F(1,296) = 4.590$, $p = 0.033$) (p. 174). Teachers with previous teaching experience with any disabilities had more positive attitudes towards inclusion of students with severe intellectual disabilities ($t(301) = 2.099$, $p = 0.037$) but with a very small effect size, (eta squared $\eta^2 = 0.0144$) (p.176).

This survey found that male teachers in Saudi Arabia had more positive attitudes towards inclusion of these students ($M = 72.04$) than female teachers ($M = 68.34$) which was significant ($t(298) = 2.387, p = 0.018$) but had a small effect size, (eta squared, $\eta^2 = 0.01876$) (p.176).

The specific focus of this study on children with severe intellectual disabilities is important but less able to be generalized for students with the range of special educational needs in other countries. The principals' selection of teachers in this survey, due to government regulation on researcher contact with teachers, weakens the validity of these results. However the findings regarding the negative effect of large class size and the positive effect of experience teaching students with disabilities support other studies analyzed.

Blackman, Conrad and Brown (2012) also used the ORI to investigate the attitudes regarding inclusion of 231 primary school teachers in Barbados and 254 in Trinidad and Tobago. The sampling was not random in either of the countries, and included only "qualified teachers" (p. 6) in Trinidad who were enrolled in a training program at the university, which was not described. These are presumed to be current teachers in an in-service program. The study found significant difference in the attitudes of teachers from Barbados ($M = 81.00$) and Trinidad ($M = 75.09$), $t(483) = 2.95, p = .003$, with a small effect size, $d = .27$ (p.6). The authors suggest that the scores for teachers from both countries ($M = 77.91$) reveal that overall attitudes toward inclusion are "mainly ambivalent" (p.6). The data show that scores were lowest on questions under the factor of "Perceived Ability to Teach Students with Disabilities" (p. 6), with teachers from Trinidad ($M = 3.33$) significantly lower than those from Barbados ($M = 6.01$), (t

(483) = 6.89, $p = .000$) when the score range for those questions was 0 - 18. This strong lack of confidence highlights a serious concern for these teachers' ability to implement inclusion. No significant difference was found for gender or for years of general teaching experience. The authors did not ask for background data on teachers' educational level of achievement, previous training in inclusive education or previous experience working with children with disabilities, therefore the important effects of these variables on the teachers' attitudes towards inclusion were not examined. The authors conclude with a need for further research on "the factors that account for variability in teacher attitude towards integration in the Caribbean" (p.8).

Summary. These studies using the ORI yielded mixed results, Alquraini (2012) did not find a statistically significant relationship between attitudes and education level or previous training in inclusion, while Dupoux et al. (2006) found that teachers with master's degrees had more positive attitudes than those with less advanced degrees. Blackman et al. (2012) did not inquire regarding the education level or training of teachers. Dupoux et al. (2006) found no difference in the attitudes of urban and rural attitudes in Haiti but do not explain their sampling method, which may affect these data. Blackman et al. (2012) revealed an important fact, that teachers perceived their ability to teach children with disabilities as low, providing more evidence for the need for better teacher training regarding inclusion.

Studies using other published instruments. Several studies in this review used other published instruments (SPATI, ATIES, etc.) or created self-designed instruments which will be explained in the individual summaries of the studies. These instruments used similar methods of providing statements regarding the philosophy of and also the

implementation of inclusion, and asked the teacher to self-report their agreement by choosing from a Likert scale for agreement or by choosing adjectives to complete the statements (i.e. very much, very little, none).

Hammond and Ingalls (2003) distributed the *Prevailing Attitudes about Inclusion* survey (no reference for this survey was given by the authors), and a second survey modified from a checklist developed by Smith, Followay, Patton and Dowdy (1995) to all 455 teachers in 13 randomly selected rural elementary schools in three chosen districts in the southwest United States, and achieved a 75% return rate to result in 343 surveys. The majority of students in these schools were of Hispanic background. The first survey contained 10 opinion statements about inclusion and the second provided 10 statements regarding the current situation of inclusion in the teachers' schools. Both surveys used a five point Likert scale to determine if teachers agreed or disagreed with the statement. In the first survey 56% of the teachers did not agree that inclusion benefits all special education students, and 51% agreed that inclusion requires too much planning. Only 35% agreed that inclusion benefits all students. The vast majority, 81% believed teachers are not trained in inclusion. The second survey found that 82% of teachers reported that special and general educators do not collaborate to provide services in their schools, and only 58% said that the regular education classroom is considered first when determining placement.

Unfortunately, these authors did not provide information regarding validity or reliability for either survey instrument, which weakens the value of these findings. Moreover, the authors did not collect demographic data such as teachers' ages, years of teaching experience, or training, so none of these important variables could be examined.

This study revealed a strong pattern of negative feelings or uncertainty toward inclusion. In these rural schools the vast majority of teachers believe they lack sufficient training to provide inclusion services. If this need exists in a rural region of the United States, it may be even greater in rural areas of less wealthy countries. The authors discuss the importance of collaboration between special educators and regular educators, however this is in the context of the United States where there are special educators. In a country like El Salvador that has very little history of special services for children with special educational needs, or training opportunities for teachers regarding these needs, the challenges of developing and implementing an inclusive system are more profound than in the United States where there is more than a 30 year history of special services, required by national law since 1975.

Also in the United States, Wilkins and Nietfeld (2004) distributed a survey developed by Van Reusen, Shoho and Barker (2000) to all 89 middle school (6th, 7th, 8th grade) teachers from four schools in Georgia. In order to evaluate the effectiveness of training on teacher attitude toward inclusion, the authors compared 27 teachers from two schools with three years of experience in an inclusion program, the Winning Ideas Network for Schools (WINS), and 62 teachers from two schools new to the program that had not received any WINS training. The WINS program involved 50 hours of staff development training related to collaboration, curriculum accommodation and behavior support. Unfortunately, no other details are provided regarding the nature of the training. The authors include the survey in an appendix and report that analysis of the internal reliability for the questionnaire in this study resulted in $\alpha = 0.809$ (p. 117). The survey included six questions regarding background for teachers, including: years of teaching

experience; gender; professional responsibility; dominant content area assignment; type of training preparation (alternative or traditional); and level of expertise or training in special education. The survey followed, with twenty prompts to which the teacher would respond on a four point Likert scale from strongly agree to strongly disagree, with lower scores indicating stronger support for inclusion. These prompts related to four fields explained below:

The teacher-training items assessed the teachers' perceptions of their level of preparation for serving students from special populations in their classroom. The academic content/teacher effectiveness items measured the teachers' efficacy for teaching content and skills to students with special needs and how the presence of special education students in their classroom affects the delivery of content. The academic climate items measured teachers' perceptions of how students with special needs affect the classroom learning environment. The social adjustment items measured teachers' perceptions of how well students with special needs would be accepted by their non-disabled classroom peers. (Wilkins & Nietfeld, 2004, p. 117)

The survey revealed a significant difference between the teachers from WINS schools ($M = 12.00$) and teachers from new schools ($M = 10.87$) in the area of class climate ($t(84) = 2.70, p < 0.01$) (p.118). Teachers from schools new to the WINS program gave more favorable ratings for inclusion regarding academic climate. The other three measures on the survey: teacher training, academic content/teacher

effectiveness and social adjustment did not reveal significant differences between the teachers with and without the WINS training (p. 118).

The fact that teachers in WINS schools did not score higher on the teacher training questions, which inquired regarding preparation for working with students with special needs, questions the benefits of the WINS training program. This study offers evidence that training alone may not change the perspective of the teachers, however few details are given regarding the nature of the WINS training, so it is difficult to evaluate why it may have failed to be successful. The authors suggest that “training focused on daily interactions with teachers to see changes in attitudes over time” (p119) is needed instead of infrequent workshops and orientations.

Wilkins and Nietfeld (2004) also found that teachers with “higher level of perceived expertise in special education” (p.119) as measured by a self-report question on the survey, reported more positive attitudes toward inclusion across both groups, ($r = -0.48, p < 0.001$) (p. 117). The study did note that the percentage of teachers reporting high to adequate level of “perceived expertise in special education” was highest in teachers with more than 16 years teaching and the next highest in those with 0-4 years teaching, attributed by the authors to the many opportunities older teacher have had for both workshops and experiences with inclusion, and the likelihood of inclusion training recent graduates would have had in the university (p. 118). The authors suggest that teachers need “support, additional training, common planning with special education teachers, and staff development that is ongoing” (p.119).

Wilkins and Nietfeld (2004) investigated an interesting variable in comparing teachers from schools with an active inclusion program with those from other schools in

the same area, with similar characteristics, just starting an inclusion program.

Unfortunately they give little description of the training and organization of the WINS inclusion program, therefore the finding that WINS has not been successful in producing teachers with more positive attitudes toward inclusion is not very helpful in developing a more effective system.

Lifshitz, Glaubman and Issawi (2004) investigated the attitudes and sense of self-efficacy of 125 regular and 103 inclusive education teachers from Israel ($N = 66$) and the Palestinian authority ($N = 192$) toward inclusion of children with varying types of disabilities, before and after a training course on inclusion. Teachers were recruited for the course by the in-service training departments; therefore this study does not offer the benefits of random sampling. The course consisted of 28 hours of classes focusing on three components: the cognitive component including definitions and laws, the attitudes and motivation component covering inclusion of individual with disabilities in society, and the behavioral component covering practical aspects and teaching methods.

The authors used The Regular Education Initiative Questionnaire developed by Phillips et al. (1990) but adapted by Gemel-Crosby and Hanzlik (1994), who “validated the questionnaire by finding a relationships of $r = 0.50$; $p < 0.001$ between teacher’s attitudes towards inclusion and their perceived competence in teaching pupils with a variety of disabilities” (p. 175). This survey asks teachers to respond to 30 questions, on a three point Likert scale, regarding their willingness and ability to have children with disabilities in their classroom, where higher numbers represent more positive attitudes toward inclusion. The adapted questionnaire relates to five types of disability: physical handicap, sensory deficit, emotional/behavioral disorders, mental retardation and learning

disability, each with three levels of severity. Specific information was not given for each disability, allowing teachers to use their own interpretation. The second part of the questionnaire focused on teachers' sense of self efficacy. The score for both Israeli and Palestinian teachers regarding attitudes toward inclusion of children with non-physical disabilities, increased significantly, ($p < 0.01$) (p.178) becoming more positive, after the intervention. The complexity of the scale described necessitates some examples of the items included, but none are provided in this study.

The attitudes of Israelis toward inclusion were significantly more positive than those of the Palestinians ($p < 0.01$) except regarding physical handicaps and mild and moderate learning disabilities/emotional disturbances. The attitudes of Palestinian teachers regarding children with visual and hearing impairments and mental retardation changed from negative to positive after the training. The Israeli teachers' sense of self-efficacy measured significantly higher than that of the Palestinians except related to physical handicaps. Before the intervention, the attitude score for special education teachers for all disability types "were significantly higher as compared to their counterparts" (p.180). After the intervention regular teachers' scores "increased significantly, while the scores of inclusive teachers remained the same" (p. 180).

The complexity of this study, examining multiple aspects of inclusion related to various disability types and compared across two areas, both before and after an intervention, cause difficulty in comparing the findings to other studies, or applying them across common themes. A simpler study with fewer variables could lead to clearer patterns. This study did show the positive effect of this particular training program on the

attitudes of teachers in both Israel and Palestine, and warrants further investigation into the details and organization of that training.

Parasuram (2006) used different surveys to investigate variables that affect teachers' attitudes toward disability and inclusive education in India. In the city of Mumbai, 391 teachers were randomly selected from randomly selected schools, 340 responded but 36 who said they had students with special education needs in their classroom were discarded and three were randomly dropped, to leave 300 surveys for analysis. The study used the Attitudes Toward Disability Scale (ATDP) developed by Berry and Dalal (1996) and the Attitudes Toward Inclusive Education Scale (ATIES) developed by Wilczenski (1992). Both instruments require responses to statements on a Likert scale where higher numbers signal more positive ideas regarding disability and inclusion respectively. The ATIES requires responses to 16 items related to four categories of inclusive accommodations: physical; social; academic and behavioral, and gives a score total from 16 to 96 for most favorable. The author does not give reliability or validity data for either instrument, but Wilczenski (1992) reported an alpha coefficient of .92 for the ATIES scale. Very little information is given regarding the ATDP, only that it measures "attitudes towards people with disabilities" (p. 233). Parasuram does not provide examples of items from either instrument. A personal information form was also used to gather information regarding background variables, including gender, age, education level, income, years of teaching experience, and acquaintance with people with disabilities.

Results from the ATIES did not reveal significant differences related to age, gender, teachers' income, education level or years of teaching experience. The ATDP

scores did reveal significant difference in attitude toward disability when separating teachers by income ($F(4,295) = 3.97, p < 0.05$), or education level ($F(2,274) = 10.42, p < 0.05$), with higher income and higher education level connected to more positive attitudes (pp.235-6). The years of teaching experience correlated negatively to attitudes, with teachers with fewer than five years teaching experience having the most positive attitudes ($F(5,294) = 4.77, p < 0.05$) (p.236). On both scales, acquaintance with someone with a disability resulted in more positive attitudes toward disability on ATDP ($F(1,298) = 5.60, p < 0.05$) and toward inclusion on ATIES ($F = 7.71, p < 0.05$) (p.237). A one way ANOVA was conducted for both scales to see if frequency of contact with the acquaintance with disability affected scores, and it did not. The same ANOVA was conducted to measure if the acquaintance was a family member, how that affected the two scales, and found that this also did not have an effect.

The examination of acquaintance with people with disabilities reveals an important factor for attitudes that is often absent from training for inclusive education, and that is the personal experience. The decision to exclude teachers with a student with a disability in their classroom was not explained but may have sacrificed valuable information regarding the effect of actual inclusion experience on teacher attitude.

In another study from South Asia, Ahmmed, Sharma and Deppeler (2012) examined teacher attitudes toward inclusive education in all government primary schools of four randomly selected districts of Dhaka, Bangladesh. Surveys were sent to all 1378 teachers at 293 schools and the return rate was 53.20%, resulting in 708 complete surveys to be analyzed. The teachers filled out demographic information as well as the School Principal's Attitudes toward Inclusion (SPATI) (Bailey 2004) and the self-designed

Perceived School Support for Inclusive Education scale (PSSIE). Both surveys used a five point Likert scale where higher numbers suggested more positive attitudes or more perceived support. The SPATI presents 24 statements related to inclusion for response, for example “Students with disabilities benefit academically from inclusion” (p.134). The authors eliminated three items from the SPATI that did not apply to this study. The reliability of the SPATI scale was calculated for this study, and the alpha coefficient was determined to be 0.79 (p.134). In the PSSIE, teachers were asked whether they agreed with eight items regarding the support offered to them by the school, for example, “I receive necessary support from the principal to implement inclusive education at the classroom level” (p. 135). For the reliability of the PSSIE in this study, an alpha coefficient was calculated to be 0.86.

The background variables of age and teaching experience revealed no significant relation with attitudes. Males were found to have slightly more positive attitudes than females. Teachers with bachelor’s degrees had more positive attitudes toward inclusion than those with lower or higher degrees. The difference between teachers with bachelor’s degrees and those with master’s or higher degrees, was significant but the effect size was small ($\eta^2 = 0.01$) (p. 136). Ahmmed et al. (2012) used Pearson product-moment correlation coefficients to examine the relationships of attitudes toward inclusion with “perceived school support” from the PSSIE ($r = 0.278$, $n = 708$, $p < 0.005$) and with “past success in teaching children with disabilities” ($r = 0.247$, $n = 708$, $p < 0.005$), which both found significant positive correlations. While the authors discuss the need for “support” from colleagues, administrators and parents as well as necessary teaching materials, little description of the scale used is given beyond the one example given above. “Past success

in teaching students with disabilities” was measured by self-response in the demographic survey questions, but the authors do not reveal the exact wording of questions, only giving results which separate teachers into three groups by past success: low, average, and higher. The study did not find significant relationships between teachers’ attitudes toward inclusion and the age of teachers, years of teaching experience or previous training on inclusive education.

The most significant independent variables, as measured by the authors, were perceived school support and previous success in teaching children with disabilities, highlighting the importance of these factors in the strategic planning of policy makers. While the number of surveys distributed was ambitious and the number returned was still quite large, the response rate of just over half lowers the validity of these results as unknown motivation for returning or not returning the survey may skew the results.

Chiner and Cardona (2012) distributed the Teachers Perceptions on Inclusion Questionnaire, developed by Cardona, Gómez-Canet and González-Sánchez (2002), to 468 regular education teachers randomly selected from schools in Alicante Spain, and had a 72% response rate, providing a sample of 336 teachers. The questionnaire presented 12 statements to which teachers responded on a five point Likert scale (1 = strongly disagree, 5 = strongly agree). The statements were divided into three topics for analysis: foundations of inclusion; skills, time and resources; and personal supports. The authors report “acceptable internal consistency” with an alpha coefficient of 0.69 (p. 6). All statements are provided in the tables presenting results and do not appear unusual when compared to other instruments used in the surveys analyzed here. They found no significant differences when comparing teachers by years of experience or gender. The

results show that 84% of the teachers surveyed thought that inclusion “develops tolerance and respect among students” (p.8) and 65% were in favor of inclusion, however only 40% agreed that “all students including those with moderate and severe disabilities can learn in inclusive settings” (p.8), and only 30% agreed that inclusion is possible in secondary education. Teachers’ ideas about the foundations of inclusion were not found to be affected by their skills, time and resources. Teachers’ beliefs did vary based on the availability of personal supports or help from special education teachers and school psychologists, $F(2,298) = 4.16$, ($p = 0.016$) (p.9).

The authors summarize their findings, stating that teachers were positive toward inclusion, however “thought that they did not have enough preparedness or sufficient time, material resources, and personal supports to adequately meet their students’ special needs” (p.11). The simplicity of the survey used provides straightforward data showing the majority agreed with all statements regarding the foundations of inclusion, but the majority did not agree with any of the statements regarding skills, resources and support available for inclusion. Interestingly the authors do not discuss the fact that 82% of teacher agreed with the statement “Inclusion requires the presence in the classroom of support educators” (p.8). This statement is identified under the foundations of inclusion section but highlights a resource that is not likely available in most schools of the world, especially in countries less developed than Spain.

In the only study focused specifically on El Salvador, Figueroa, Martínez and Rosales (2005) completed a thesis for their *Licenciatura* in Psychology at the University of Central America. Their study investigated the attitudes of 234 teachers from 56 primary schools in San Salvador, the capital of El Salvador. The sample was chosen to

represent teachers from all six grades of the first and second cycle of primary school (*Educación Básica*) from both regular schools (70%) and integrated regular schools (*escuelas regulares integradoras*) (30%).

The authors used a questionnaire developed by Fernandez (1995) which included 10 questions regarding demographic information about the teachers and 28 questions related to their attitudes, which were answered on a 5 point Likert scale, where higher numbers represented more positive attitudes toward inclusion. The authors give a reliability coefficient of 0.92 for the instrument (p.86). The six factors in the survey are: philosophy, effect on other typical students in the class, appropriate placement, conduct of students, administrative aspect of inclusion, and ability of teachers to teach students with special educational needs.

This study found that 69.2% of teachers had a negative attitude toward inclusion measured by the survey, though the average score for all teachers was 2.73, not far below 3.0 which indicated “undecided” on the five point scale. The authors state that 77.8% of the teachers responded that they had no training in special education, yet 66.2% of the teachers responded that they had had children with special education needs in their classes. Teachers responded highest, or most favorably, on items related to philosophy of inclusion ($M = 3.44$). They responded lowest, or least favorably, on items regarding student conduct ($M = 1.93$). For items regarding how inclusion affected other students, teachers’ answers resulted in a mean just below the middle or undecided level ($M=2.93$) (p.102). Teachers of 5th and 6th grade showed more favorable attitudes to inclusion, and 1st and 2nd grade teachers showed the least favorable attitudes, but the difference was not statistically significant.

A higher percentage of teachers with previous training in special education (36.5%), including in-service courses and seminars as well as courses and diplomas during teacher preparation studies, showed positive attitudes toward inclusion than those without any training (29.8%), but the difference was not statistically significant according to the authors . A higher percentage of teachers with previous experience with students with special needs (34.2%) showed positive attitudes toward inclusion than those without experience (24.3%), but again the authors note that the difference was not statistically significant.

Figuerola et al. (2005) offer a good foundation for understanding the situation of inclusion in El Salvador. However, the entire sample of teachers was from inside the capital city which separates these results from the teachers in rural schools. More information on the nature of training for inclusion that has been received by teachers, both in formal university studies and through in-service courses, would be very valuable. This study, while never published, has great importance for any further study of teachers' attitudes toward inclusion in El Salvador. The fact that the majority of teachers in this survey show negative attitudes toward inclusion and also have no training in inclusive education, establishes the need for exploring methods for improving understanding and implementation of an inclusive system.

Summary. These studies do not reveal any definite pattern of teacher attitudes and variables. Lifshitz et al. (2004) did show a positive effect of a training intervention, while Chiner and Cardona (2012) found that teachers felt unprepared, therefore calling for more training, yet Wilkins and Nietfeld (2004) found no positive effect from the training program they examined. Ahmmed et al. (2012) found teachers with bachelor's

degrees to have the most positive attitudes, yet Parasuram (2006) found no correlation of attitudes with education level. Parasuram found a positive effect for acquaintance with someone with a disability and yet Wilkins and Nietfeld found teachers from schools that had not begun an inclusive program showed more positive attitudes toward classroom climate under inclusion than those with experience in the program. Perhaps the variety of these findings result from a complexity of other cultural and economic variables that may be overlooked when comparing studies from multiple countries at different stages of development in the quest for educational quality. However, in El Salvador, Figueroa et al. (2005) provided important information regarding the situation of teachers and inclusion, showing slightly negative attitudes toward inclusion as a whole, but positive attitudes on the subscale addressing the philosophy of inclusion, and revealing a lack of teacher training for inclusion.

Self-designed surveys. Other studies used self-designed surveys to measure teacher attitudes toward inclusion. Álvarez, Castro, Campo-Mon and Álvarez-Martino (2005) distributed a self-designed questionnaire to 389 teachers in 35 primary schools across Asturias, Spain to investigate attitudes toward inclusion. The article, published in Spanish, uses the term “*integración*” which could have connotations short of inclusion; however UNESCO uses the Spanish word “*integración*” in place of “inclusion” in the Spanish version of the Salamanca Statement (UNESCO, 1994b), therefore I have translated the term to “inclusion” in this analysis. The questionnaire included 100 items with responses on a 10 point Likert scale where 1 = very low and 10 = very high, or for some items multiple choice responses.

Teachers displayed positive attitudes toward inclusion, responding with an average of 7.2 for a statement that it is good, “*parece bien*” (p.602) to have children with special education needs in the classroom, and an average of 8.3, on the scale 1-10, that if they had children with special education needs they would devote attention to them. The majority of the teachers, 68%, agreed that the presence of students with special needs in the classroom does not harm other students, and only 32% agreed that they preferred not to have students with special needs in their class. When asked to rate methods for improving inclusion, the highest scores were for involving the family ($M = 9.4$), reducing number of students in classes ($M = 8.7$) and contracting with more specialists ($M = 8.7$) (p.603).

The majority of teachers did not choose inclusive classrooms as the preferred placement for children with disabilities. Inclusive classrooms were preferred by 43.2% of teachers for children with physical disabilities, 28.6% for intellectual disabilities, 33.8% for sensory disabilities, and only 15.4% for “*trastornos graves de personalidad*” (p. 603) translated by the National Institute of Health as severe personality disorders, or mental illnesses (National Library of Medicine, 2013), presumably qualifying as emotional disturbances under United States IDEA definitions. However for children with physical, intellectual and sensory disabilities, close to 30% of teachers chose “*educación combinada*” or combined education, which is an unclear term. The authors note this confusion believing the teachers did not know the term “*educación combinada*”, and the authors do not define the term nor explain why they included it as a choice in the survey. It is possible that some teachers understood this term as comparable to inclusion, in which case the sum of these two choices would be a majority, but this remains unclear.

Despite the confusion resulting from the terms not understood by teachers, this study reveals that teachers agree with the philosophy of inclusion but still desire more support in the proper implementation of the necessary services. While the results were clearly presented in multiple tables in this study, the failure to provide direct examples of how the survey was worded or to give any data for reliability and validity of the self-designed instrument as well as the lack of information on the sampling technique used necessitates serious questioning of the results this study.

In the northeast of England, Sadler (2005) conducted a three-year study of teachers who had taught students with moderate or severe speech/language impairment. Sadler distributed a 12 item postal questionnaire to 89 teachers in three years, following all teachers of a group of children with preschool diagnosis. All but one teacher invited agreed to participate. This instrument included two open-ended questions regarding teachers' views and attitudes. No data were given for the validity or reliability of this self-designed instrument, but the whole survey is provided in the article's appendix. Most items provide multiple choices for response in some case on a scale, for example, when asked to give the amount of experience a teacher had in the past with students with speech and language impairment, the teachers could choose from: none, very little, some, considerable.

The majority of teachers appeared to hold positive attitudes toward inclusion, naming more advantages than disadvantages. However, few felt they "had the necessary knowledge, support or confidence to meet the educational needs of this client group" (p.159). The disadvantages they listed "were mainly related to limitations of the system, for example, lack of support, lack of time for individual attention" (p.157). When asked

about the future education outcomes of their students with speech and language difficulties, an equal number of teachers, 71% , responded that it was probable the students would “catch up after a slow start” as those who responded to another question that the students “may always be at a disadvantage academically” (p.156).

The specific nature of this investigation and the small scale of the intentional sampling, as well as the lack of validity and reliability data for the self-designed instrument, limit the applicability of the results across inclusion of children with various special needs. The study points to further need for research on teacher knowledge related to speech impairments and the ideal methods for improving their understanding.

In a broader study, Deng (2008) explored the inclusion of students with disabilities under the national “Learning in Regular Classrooms” (LRC) model. Urban and rural differences were investigated in this study, examining the attitudes of 252 primary teachers from 33 rural schools and 24 urban schools in Hubei Province of China that had children with disabilities. Deng used a survey divided into three factors: 1) the positive effect of inclusion, 2) the negative effect of inclusion and 3) the benefit of segregated special education. A significant difference was found by one-way ANOVA analysis, between urban and rural attitudes for the “negative effect of inclusion” $F(1,221) = 13.494, p < 0.01, (p.485)$ with urban teachers showing a significantly higher belief in the “negative effect of inclusion.” “Urban teachers showed more negative attitudes toward inclusion, though both rural and urban teachers had similar understanding of the positive effect of inclusion and benefits of segregated special education model” (p. 485). On the total for the three factors, ANOVA revealed a significant difference in attitudes for urban and rural teachers ($p < 0.01$), however the

authors do not give the mean scores for urban or rural teachers on each of the three factors, which would be valuable for comparison.

The author notes that this difference between rural and urban teachers is contradictory to western studies which show a correlation between improved resources, usually available in urban areas, and positive attitudes toward inclusion. Deng notes three possible reasons for this contradiction; “ (1) There are more special schools in urban than rural areas; (2) it is very difficult for the rural children with disabilities to go to urban special education schools due to the difficulty in transportation and unfavorable economy, . . . (3) urban schools encounter greater pressure to enhance students’ academic performance” (p.488). Rural and urban teachers’ attitudes toward inclusion were not found to have a significant relation to the length of or types of special education training. This is attributed by the author to the population’s “minimal special education training” (p.487).

No significant differences were found using ANOVA analysis for other variables: gender, age, teaching years, training types and time when dividing the sample into two groups, rural and urban. The author states that “follow-up post-hoc analysis indicated” (p. 486) that in urban areas teachers with higher than college level background showed significantly less agreement with the “negative effect of inclusion” than those with college-level and lower than college-level education, but no data is given regarding this analysis (p.486).

While Deng used a self-designed questionnaire, gave no data for validity or reliability, and did not use random selection of teachers, the intentional investigation of teachers involved with China’s inclusive LRC program in both urban and rural schools is

a good step toward understanding attitudes of teachers in rural areas as countries begin to implement inclusive programs in local schools. Deng noted the interesting finding that urban teachers could be more negative toward inclusion than rural teachers in some cases and offered theories to explain this contradiction to other research, which aligns positive attitudes to places with greater resources.

Batsiou, Bebetos, Panteli and Antoniou (2008) used another questionnaire to compare the attitudes of primary school teachers in Greek and Cypriot primary schools toward inclusion of students with disabilities. An open-ended questionnaire was completed by 87 teachers from Greece and 92 from Cyprus; it contained statements related to seven variables: experience, intention, attitudes, subjective norms, self-identity, attitude strength, knowledge and information. The authors credit the use of planned behavior theory for developing the survey. Teachers indicated their responses on various seven point scales. The authors give no information regarding the validity or reliability of this self-designed instrument, nor the sampling method used to choose teachers.

Educators from Cyprus had more positive attitudes toward inclusion ($M = 4.9$), more positive intentions ($M = 3.6$) and showed more confidence in their knowledge regarding disability ($M = 4.1$) than teachers from Greece (attitudes $M = 4.4$, intentions $M = 2.9$, knowledge $M = 3.5$) (p.212). The teachers from both Greece and Cyprus stated that what they learned during their university studies regarding teaching students with special educational needs “was not satisfactory” (p.208). Previous experience teaching children who had special education needs was the factor most strongly correlated with positive attitude ($r = 0.88, p < 0.001$).

The authors note the limitation of their study that “only a small number of questionnaires were completed” (p. 207), but do not give a response rate and claim a sample of 179 teachers, so it is unclear how many surveys were distributed. In fact their numbers do not add up as they claim to have surveyed “92 from Cyprus (15 men, 70 women)” (p. 201). The authors spend more time discussing statistical analysis of the data regarding relations between various aspects of ideas: intention, attitude, self-identity, attitude strength and knowledge, while no discussion is given to the positive or negative values of the response means, which are only given in a table, or to concrete variables that can be compared across other studies.

Summary. The studies that used self-designed surveys do not converge with respect to any common conclusions, but reveal several important ideas in the important movement toward equitable quality education for all children. The positive influence of previous work with children with special educational needs on teacher attitudes, which Batsiou et al. (2008) found, may be the most important. The findings of Deng (2008), Sadler (2005), and Álvarez et al. (2005) all support the need for more training for teachers to improve their knowledge and abilities to work with children with disabilities. Deng also provided evidence for the need to explore how attitudes of teachers may be different in urban and rural areas.

Mixed-methods studies

Three more recent studies examined teacher attitudes using a mixed methods approach. Alghazo and Gaad (2004) investigated the attitudes of regular classroom teachers from public schools in Abu-Dhabi, the capital of the United Arab Emirates (UAE), regarding inclusion of students with disabilities. The authors sent 250

questionnaires to teachers at a random sampling of schools, all in Abu-Dhabi. The return rate was 64%, with 160 surveys returned, 8 of which were incomplete therefore not included. The survey used a self-designed questionnaire where the teachers answered on a Likert scale, 1-5, with a lower number being more positive toward inclusion. The questions are presented in the article but no data is given for validity or reliability of this self-designed survey.

The researchers conducted structured individual interviews with teachers, presumably after the survey, for a qualitative part of the mixed methods study, however the number of interviews conducted is not revealed. The authors explain the use of open-ended questions “for those who had shown relatively positive attitudes toward inclusion” and those with “relatively negative attitude were deliberately asked to state reasons for their reluctant to include such students” (p.96). However, the results and discussion focus heavily on data from the survey, and not from the interviews. No quotations are given from the interview in the results or discussion, and the only fact that appears to originate from the interview is the statement that female teachers used “relatively more sensitive, positive and culturally appropriate terms and references during interviews” (p. 97) and that males used more negative terms.

In the discussion Alghazo and Gaad (2004) note that Emirati teachers “in general, tend to have negative attitudes toward the inclusion of students with disabilities” (p 97), yet in the results they give the mean statistic for attitude as 3.2, which they define as “neutral” (p.96). If this conclusion is influenced by comments in the interviews, no specific facts are given to support it. The authors looked at the relationship between attitudes and two independent variables, gender and years of general teaching experience.

For teaching experience the authors divided teachers into three groups: 1-5 years, 6-11 years, and more than 12 years of general teaching experience. ANOVA analysis revealed a significant difference ($F = 10.3$, $df = 2, 149$) in attitude by years of teaching experience, with significant difference between the attitudes of teachers with 6-11 years of experience and each of the other groups (1-5, and 12 or more). Commenting on the influence that years of experience has on attitudes, the authors state that “as educators gained more experience in teaching (12 or more), their acceptance of including students with disabilities increased” (p. 97). They ignore the fact that teachers in the middle range with 6-11 years of experience had the most inclusive attitudes ($M = 3.03$), not those with more than 12 ($M = 3.28$), while those with 1-5 years had the least inclusive attitude ($M = 3.30$). Therefore a linear relationship between years of general teaching and attitude toward inclusion was not established. A t -test found a significant difference in attitudes by gender ($t = 4.42$, $df = 150$), with male teachers having less positive attitudes ($M = 3.350$) than females ($M = 3.11$).

One major limitation of this study was that the authors’ discussion on attitude toward types of disability is unclear. The survey includes four questions regarding disability categories, but combines physical disabilities, hearing and visual impairments into one question, yet these three disability categories are reported separately in the results, which list six disability categories in each table. The authors report no significant difference in attitudes to types of disability by gender. While significant differences are reported in attitudes toward some types of disability by years of experience, there is no definite pattern, and the difference in the grouping of disability types in the questionnaire from the grouping in the findings casts doubt on the results.

Another concern is that the authors make contradictory statements in various sections regarding the general attitudes of teachers toward inclusion. Their unclear explanation of the analysis of results related to types of disability limit the value of this study. While the attempt to provide richer information regarding teacher attitudes by interviewing the teachers after the survey should be applauded, their presentations of the qualitative findings of this study are lacking.

In another mixed methods study, Díaz Haydar and Franco Media (2010) investigated the perspectives toward inclusive education of 23 teachers from seven schools with inclusion programs in Soledad, Colombia. No information is given regarding the sampling procedure. The authors used a version of the ORM scale developed by Larrivee and Cook (1979), described above, and adapted by Garcia and Alonso (1985), as well as a second questionnaire developed by Domingo Palomares (1992). They later interviewed the teachers with an unstructured informal interview described as “*dialogica y colloquial*” [dialogic and colloquial] (p. 18).

The authors give the mean of the overall score from the ORM for each of the seven schools and only one school was on the negative side for attitudes. The authors note that this is one of the oldest and most traditional schools of Soledad, drawing poorer students. The authors give the overall score from the ORM for each teacher. Within a scale of 0-150, seven teachers had scores over 106, counted as positive by the authors, seven had scores under 90, counted as negative, and 9 had scores between 91 and 105, counted as indecisive by the authors. The other results provided in this study are from the questionnaire designed by Domingo Palomares (1992). The authors asked the teachers to respond to 14 statements by choosing an answer on a scale. In one question

teachers were asked if information they had received about inclusion had been, “none, little, average, enough, or much” (Domingo Palomares, 1992, p. 469). For this question, three teachers answered “little,” 14 answered “average,” three answered “enough” and three answered “much.” For some items, the question asked for positive or negative response. No data was given by the authors for the reliability or validity of this instrument. On the questionnaire, 73.9% of the teachers answered that they believed their school should continue inclusion. The number of teachers who responded that their opinion toward inclusion had changed a lot (*mucho*) after working in an integrated school was 56.5%, and 52.2% responded that their opinion was more favorable toward integration after gaining experience in the integrated school (p.18). The authors do not provide data on the overall nature of the teacher opinions regarding inclusion before or after their experience, as only change was asked about in the questionnaire.

Several themes emerged from the interviews. While some teachers see a need for special schools, about 30% understand and accept inclusion. Some teachers call for the urgent need to be trained to teach students with special needs, and some call for more resources, as some schools are still not equipped to meet the needs of typical students. Teachers feel that students with disabilities are not rejected by other students and that inclusion is important for the society. Some teachers mention fears of losing control or discipline with inclusion, and some note the occurrence of anxiety and stress which accompany the additional work of inclusion, as well as the lack of training. The authors conclude that many teachers see the importance and necessity of inclusion, but also express their lack of training to make it work well.

This study is a welcome attempt to better understand the attitudes of teacher toward inclusion in Latin America. However, the small number of teachers investigated and the unexplained sampling technique limits the value of the study. The use of both an internationally recognized survey as well as interviews provides excellent triangulation of the complex ideas involved in teacher attitudes. The idea that teachers see inclusion as important but are uncertain of their preparation to be successful with it is an important finding. This study reveals teachers with more positive attitudes toward inclusion than those Figueroa et al. (2005) investigated in El Salvador, which may reflect the experience these teachers in Colombia have had with inclusion. The teachers' desire for more training is consistent with other studies reviewed.

Hwang and Evans (2011) conducted another mixed methods study and distributed a questionnaire regarding inclusion to 33 general education teachers in South Korea, who each had one student with disabilities in their class. This questionnaire, adapted from the *Inclusion Questionnaire for Educators* developed by Salend (1999), included demographic information and provided 25 statements regarding inclusion and willingness to teach students with disabilities. The teachers were asked to respond on a Likert scale for agreement with the statements. No data for the reliability or validity of this instrument is given by the authors. A follow-up interview with 13 questions from the Salend (1999) protocol was conducted with teachers from two of the schools. The small number of teachers was not large enough statistically to generalize results to the population of teachers of Korea, yet it provided some interesting ideas regarding inclusion. While 41.37% of the teachers supported the concept of inclusion, 55.16% did not wish to teach students with disabilities in their classrooms. On the survey, 75.85%

responded “students with disabilities would receive a better education in a special education classroom” (p.140). Older teachers and those with more years of teaching experience showed more negative attitudes and less willingness for inclusion

In the interviews, most teachers demonstrated positive attitudes toward inclusion and some teachers reported mutual benefits from inclusion for students with and without disabilities. Most emphasized the need for more support, resources (training and materials) and smaller class sizes to make inclusion successful. One noted that principals could encourage teachers to adopt inclusion with support, and teachers could encourage typical students to accept students with disabilities by demonstrating positive attitudes toward them.

Results from the survey by Hwang and Evans (2011) follow those of many of the studies analyzed here, showing an undecided or neutral attitude overall toward inclusion, with close to half the teachers being open to inclusion and close to half not feeling ready to have children with disabilities in their class. The interviews support the theme, found in much of the research, of a desire for greater support and resources to implement inclusion. The interesting finding was the high percentage of teachers who said that children with disabilities would receive a better education in special classes. This reflects the findings of Deng (2008) which showed urban teachers were more negative about inclusion, and supports his theory that teachers in urban areas, like Seoul, feel that special schools are a more realistic option for students due to their proximity and familiarity, or in this case separate classes that could be provided in a well-resourced urban school. Rural teachers in many countries may have never seen these possibilities.

Summary. These mixed methods studies allow for the depth of qualitative investigation, though they lack the numbers to establish results from the survey as significant. Similar to Díaz Haydar and Franco Media (2010), Hwang and Evans (2011) used both a survey and interview with a small number of teachers purposely selected in a single location. The small number of interviews allowed these two studies to dedicate sufficient energy to analyzing and presenting the qualitative findings, unlike Alghazo and Gaad (2004) who surveyed a large number but failed to provide deep understanding of the teachers through their interviews. The need for resources and support are emphasized in Hwang and Evans while Díaz Haydar and Franco Media note a call for more training for inclusive education.

Qualitative study

In contrast to previously reviewed studies which used various questionnaires and surveys, Starczewska, Hodkinson and Adams (2012) conducted a qualitative study in which they interviewed a small number of primary school teachers from a city in Poland, eight from a mainstream school with a policy of inclusion, and two from a special school, regarding their conceptions of inclusive education. The interviews were semi-structured. As discussed earlier, this study mentions the difference in meaning between the terms “integration” and “inclusion” in the UK literature, but found in the Polish system the terms seem to have the same meaning. “Integration” was the term more commonly used and understood by the teachers.

The authors noted that the negative conceptualization of disability that some teachers displayed and the use of negative vocabulary such as “ill” was “disturbing

especially to those whose research had been localized in the UK” (p.165). Having asked teachers’ opinions on whether all children could be integrated into “mainstream” schools, the authors concluded that children with mild and moderate disabilities are more likely to be educated in “mainstream” schools, and teachers are less comfortable with inclusion of children with more severe disabilities, noting “severe intellectual and physical disabilities are still regularly excluded” (p. 167). Most of the teachers expressed the belief that integration benefits children with and without disabilities. Teachers believe integration works well in early years of education, but that the system struggles to integrate older children. Most teachers believed they were well prepared to work with children with disabilities, but some teachers mentioned that in-service training they had received was irrelevant and not useful, and some expressed concern that mandatory training could be controversial.

These authors present a rich summary of data from interviews with a small number of teachers. Their findings support themes found in other studies, which include lower approval for inclusion of children with severe disabilities, as well as lower approval of inclusion of children with any disability in secondary education. The unusual finding that most teachers found themselves well prepared to work with students with disabilities calls for further study of whether this finding is true across Poland, and if so, investigation of how the system is preparing these teachers.

Summary of Methodological Issues

As indicated throughout this review, many of the studies reviewed did not provide data for validity and reliability for the survey instruments used, which limits the ability to

make comparisons across studies. Multiple studies measured the amount of teacher training for inclusion with questions on the surveys or compared teachers in groups with and without training (Wilkins & Nietfeld 2004) or before and after a training intervention (Lifshitz et al. 2004). However few details, if any, are given about the nature of that training. The simplicity of questionnaires with Likert responses provides easy comparison of data but limits the depth of information revealed about important details regarding training, experience and attitudes. Few of the studies used instruments which specifically asked teachers to distinguish between the implementation of inclusion for students with varying types of disabilities. This is an important aspect of teacher attitudes which calls for further investigation. Importantly, few studies investigated attitudes of teachers in rural areas specifically. Most research has focused on urban centers, but with many children in the world attending rural schools, this is another variable requiring additional research in the quest to provide quality education for all children. Finally only one study was identified that specifically investigated the issue of teachers' attitudes toward inclusion in El Salvador. Further investigation of this topic would be valuable to current efforts to implement more inclusive programs in areas that already face tremendous challenges in providing primary education, especially in rural areas.

Conclusions from Literature

The majority of the studies reviewed here revealed attitudes in the middle of the range or close to “undecided” regarding inclusion. Some were interpreted by the authors as slightly positive or slightly negative, but none of those studies using survey data reported strongly negative or strongly positive attitudes toward inclusion for the majority

of teachers. Kalyva, Gojkovic and Tsakiris (2007) revealed teachers' mean scores appear close to neutral. Avramidis and Kalyva (2007) found teachers to be slightly positive in their attitude to inclusion. Monsen and Frederickson (2004) divided the results into three groups by score on the ORM and the middle group (between the 75th and 25th percentile) had a slightly positive mean scores on the scale, yet the mean score for teachers on the ORM in Ojok and Wormnaes (2012) appeared slightly negative, and Diaz Haydar and Franco Media (2010) counted the scores of seven teachers as positive on the ORM, seven as negative, and nine as indecisive. Dupoux, et al. (2006) reported teachers to have scored just above the midpoint on the ORI. Alghazo and Gaad (2004) counted the mean of their teachers as neutral in their study. However, Figueroa et al. (2005) reported that the majority of teachers surveyed in San Salvador had a negative attitude toward inclusion.

Some studies noted that attitudes were more positive about the idea or philosophy of inclusion than they were about actually including children with disabilities in their own classrooms. Figueroa et al. (2005) found that teachers rated statements regarding philosophy of inclusion more positively ($M = 3.44$), while rating those related to conduct more negatively ($M = 1.93$) on a five point scale, where higher numbers show positive attitudes. This supports the idea that teachers may philosophically believe in the idea of inclusion more than they are open to the actual practice. In Sadler's (2005) study, the majority of teachers appeared to hold positive attitudes toward inclusion, naming more advantages than disadvantages. However, few felt they "had the necessary knowledge, support or confidence to meet the educational needs of this client group" (p.159). The disadvantages they listed "were mainly related to limitations of the system, for example,

lack of support, lack of time for individual attention” (p.157). Avramidis and Kalyva (2007) found positive means on the MTAI for core perspectives ($M = 2.86$) and for expected outcomes ($M = 2.41$), which both relate to the philosophy of inclusion, but negative for class practices ($M = 3.86$) which is more closely related to the application of inclusive education (p. 380).

Díaz Haydar and Franco Media (2010) discovered from interviews that on the positive side, teachers feel students with disabilities are not rejected by other students and that inclusion is important for the society. However, some teachers fear losing control or discipline with inclusion, and some note the anxiety and stress which accompany the additional work of inclusion, as well as the lack of training. The authors conclude that many teachers see the importance and necessity of inclusion, but also feel that their lack of training prevents success. Hwang (2011) determined that while 41.37% of the teachers interviewed in Korea supported the concept of inclusion, 55.16% did not wish to teach students with disabilities in their classrooms.

Interestingly Ojok and Wormnaes (2012) examined the attitudes and willingness of teachers in Uganda to include children specifically with intellectual disabilities in their classroom, and found the overall mean for attitude on the ORM was slightly negative ($M = 2.27$ using a four point scale), but a self-designed instrument to measure willingness was slightly positive ($M = 2.73$ on the same four point scale).

In several studies where questions were asked regarding different disability types, teachers expressed greater support for inclusion of children with mild disabilities than for teaching children with more severe disabilities in the regular classroom. There was some

variation in what disabilities were counted as easiest and most difficult to accommodate. Dupoux et al. (2006) asked teachers in Haiti about types of disabilities (mobility, visual or hearing, learning disabilities, and emotional problems) that teachers thought they could “effectively accommodate” (p.7). Learning disability was the category most believed they could effectively accommodate. Mobility impairment was the category next most frequently endorsed by teachers. Less than a quarter believe they could accommodate students with visual or hearing disabilities and fewer thought they could effectively accommodate students with emotional disorders (p.8).

Chiner and Cardona (2012) found that 65% of teachers were “in favour of inclusion” (p.8). However, only 40% agreed that students with moderate and severe disabilities can learn in inclusive settings. Avramidis and Kalyva (2007) found that teachers thought students with learning difficulties, speech and language problems and physical/motor impairments were easiest to accommodate, while students with sensory impairments, autism and brain injury or neurological disorders need the greatest degree of classroom adaptation. Starczewska et al. (2012) concluded that children with mild and moderate disabilities are more likely to be educated in “mainstream” schools, but severe disabilities are regularly excluded. Lifshitz et al. (2004) stated that attitudes toward inclusion in both Israel and Palestine “could not be dissociated from the type and severity of need” (p.184).

No clear relationship has been established between attitude to inclusion and the education level achieved by the teacher, as Ahmmed et al. (2012) found those with a bachelor’s degree had the most positive attitudes, while DuPoux et al. (2006) found those

with graduate degrees had the more positive attitudes, and Parasuram (2006) found no correlation between attitude and teacher's education level achieved.

Similarly, a clear relationship between number of years of experience as a teacher and attitudes toward inclusion was not found. Monsen and Frederickson (2004) found no significant relation, however in some cases in Hwang and Evans (2011) and Parasuram (2006), teachers with more years of general teaching experience had more negative attitudes toward inclusion. This aligns with the theory from the literature review by de Boer et al. (2011) that as teachers get older they become "stale" and less open to new ideas or change, but only these two studies provide data to support that theory.

Previous experience working with children with disability or in inclusive settings was found to have a positive correlation with attitudes toward inclusion in some studies. Parasuram (2006) asked teachers if they had an "acquaintance" with a disability and found that those who did had significantly more positive attitudes toward inclusion than those who did not. Ahmmed et al. (2012) reported a significant correlation between having past success teaching students with disabilities and positive attitudes toward inclusion on the SPATI survey. Ojok and Wormnaes (2012) found that teachers who had a student with intellectual disability in their class had a more positive attitude, though not significant, and significantly more willingness than teachers who did not. Díaz Haydar and Franco Media (2010) investigated the perspectives toward inclusive education of teachers in schools with inclusion programs, and 52.2% responded that their opinion was more favorable toward integration after having experience in an integrated school (p.18).

Figuerola et al. (2005) found a higher percentage of teachers in San Salvador who had previous experience working with students with special needs showed positive attitudes toward inclusion than those without experience. Alquraini (2012) stated that teachers with previous teaching experience with any disabilities had more positive attitudes towards inclusion. Kaslyva et al. (2007) found that teachers with experience working with students with special needs had a significantly more positive attitude toward inclusion across the three subscales of the MTAI survey. Avramidis and Kalyva (2007) compared teachers from schools operating “integration units” and those from other schools. This variable had significant effect on teacher attitudes, with teachers from schools with integration units showing more positive attitudes under core perspectives than those from schools without. Monsen and Frederickson (2004) however, found no significant difference in score on the ORM for teachers who had contact with people who have disabilities.

Many studies found a need for more training and resources (material, personnel). Some expressed specific dissatisfaction with previous training they had received. Figuerola et al. (2005) reported that 71.4% of teachers surveyed answered that their preparation to work with children with special needs was limited. This study also reported a higher percent of teachers with training in special education had positive attitudes toward inclusion than those without. However, neither number was a majority.

Deng (2008) found no significant difference in teacher attitude as a function of special education training, but theorized that this was due to the minimal training teachers had received, reporting that 69.1% of teachers had not received any training and less than five percent reported more than a week of training (p.478). Batsiou et al. (2008) reported

that teachers from both Greece and Cyprus expressed dissatisfaction over what they learned about teaching students with special educational needs in university.

Similarly, Díaz Haydar and Franco Media's (2010) interviews revealed that some teachers feel an urgent need to be trained to teach students with special needs, and some call for more resources. The authors conclude that many teachers see the importance and necessity of inclusion but also express that they lack training to make it work well.

Alquraini (2012) did not find the amount of previous training in inclusive education to have a significant impact on attitudes. Ahmmed et al. (2012) showed significant positive correlations between attitudes toward inclusion and "perceived school support."

The movement for more inclusive education for children with disabilities around the world requires further research on the important factor of teacher attitude toward inclusion. The relative lack of published research on this subject conducted in Latin America, and especially in rural places, where so many of the poorest people live, necessitates the specific investigation of the development of inclusive schools in this area.

Chapter III

Methodology

This study was designed to investigate the attitudes of teachers in rural primary schools of El Salvador toward the inclusion of students with disabilities in their classrooms. After restating the research questions I describe the methodological approach I chose to collect and analyze data. Following this I describe the remote municipality in the rural department of El Salvador, in which I conducted this study. I then describe the specific methods used, discuss the ways in which I maintained confidentiality for participants and ensured the credibility of this research in order to compare its findings to those of published studies on teacher attitudes toward inclusion from around the world.

Research Questions

The purpose of this study was to explore the beliefs and attitudes of primary teachers in rural El Salvador regarding disability and inclusion and addressed the following questions:

1. How are children with disabilities receiving education services in El Salvador today?
2. What are the teachers' attitudes toward inclusion of children with disabilities in regular classes?
 - a. What do teachers believe are the facilitators of or barriers to inclusion?

- b. What do teachers believe about classroom management and peer interaction in an inclusive classroom?
 - c. How do teachers perceive their ability to teach children with disabilities?
- 3. How are the teachers' attitudes toward inclusive education for children with disabilities related to the severity of the disability?
- 4. How have teachers been trained for implementation of the inclusive policy of the Ministry of Education?
 - a. How are the teachers' attitudes toward inclusive education influenced by training and or experiences they have had?

Rationale for Methodology

To examine the beliefs and attitudes of teachers in rural El Salvador regarding the inclusion of children with disabilities in regular primary classes, I conducted a mixed methods case study investigation. The premise of mixed methods research is that “the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone” (Creswell & Clark, 2007, p.5). My study followed a two phase mixed methods explanatory design (Creswell & Clark, 2007) where quantitative data collected in the first stage was examined and then explained in more detail using qualitative data from the second phase.

I chose to conduct a mixed methods investigation because I recognize the value of quantitative data collection to summarize the attitudes of a large group, as well as the

value of collecting qualitative data to explore and understand those attitudes at a deeper, more complex level with a smaller group. Creswell and Clark (2007) describe mixed methods research as fitting a pragmatic world view which is oriented toward “what works” (p. 23). “Surveys are good because they allow collection of data from a larger number of people” (Mertens, 1998). While a single survey completed by a large number of teachers from across rural areas of El Salvador would be the most representative of this population, it was not possible to conduct such a large scale survey due to the difficulty and expense of visiting many rural schools across El Salvador, as well as safety concerns resulting from the current security situation in country (US State Department, 2014). Therefore, a mixed methods study provided the best working method to collect the most useful data from the population to which I had access.

As indicated in chapter two, most of the literature I reviewed regarding teacher attitudes toward inclusion relied on printed surveys completed by teachers. Czaja and Blair (2005) state that the basic purpose of a survey begins with the desire “to know, which is to say measure, some unknown characteristic of a population” (p. 4). To investigate the attitudes of teachers in this study I used a published survey, *Opinions Relative to Integration (ORI)* (Antonak & Larrivee, 1995) that was used in three studies from around the world which I reviewed (Alquraini, 2012; Blackman et al., 2012; Dupoux et al., 2006). Three more studies (Diaz Haydar & Franco Media 2010; Monsen & Frederickson, 2004; Ojok & Wormnaes, 2012), used the earlier version of the same scale, the *ORM* (Larrivee & Cook, 1979). The new survey covers four factors: “Benefits of Integration,” “Integrated Classroom Management,” “Perceived Ability to Teach Students with Disabilities,” and “Special versus Integrated General Education,” and

provides a sub score for each. My use of this instrument, the ORI, allowed analysis of teachers' attitudes from rural El Salvador in the context of these recent studies, which were reviewed in chapter two.

Data collected using the ORI was supplemented with qualitative data collected via two written open-ended questions included at the end of the teacher questionnaire distributed to all teachers in the 12 rural schools of the municipality, as well as by open-ended interviews and observations with selected teachers in the second phase of this study. Gay, Mills and Airasian (2006) state that the purposes of qualitative research “are broad in scope and center around promoting a deep and holistic understanding of a particular phenomenon, such as an environment, a process or even a belief” (p. 399). Qualitative research is appropriate when the research question seeks to “understand the program theory – that is, the staff members’ (and participants’) beliefs as to the nature of the problem they are addressing and how their actions will lead to desired outcomes” (Mertens, 1998, p. 163). This study seeks to describe the beliefs of teachers regarding the complex challenge of including children with disabilities in regular classes across schools of El Salvador and to explore how training and experience may have influenced those attitudes.

I conducted a case study of the rural primary schools of one municipality, San Felipe, two hours from the capital, in the department of Hermosillo, where I could visit each rural school with the help of my local contacts. I use the pseudonyms of “San Felipe” for the municipality and “Hermosillo” for the department which was the site of my study. Because no previous research was found regarding the attitudes of rural teachers in El Salvador toward inclusion, this study provides valuable insight regarding

rural schools in one municipality, which could be applied to other rural schools in El Salvador. Interviews with teachers from these schools provide a deeper understanding of the situation and attitudes regarding inclusion for this group of rural teachers, and produce the first investigation of teachers' attitudes toward inclusion in rural El Salvador.

Setting

As mentioned previously, the education system in El Salvador was greatly harmed by civil war, which lasted from 1980 to 1992. Many children, especially those living in rural areas, were left without access to established government schools during the war. Although there have been efforts to initiate education reform since that time (Edwards, 2013; Gillies, Crouch, & Flórez, 2010;), El Salvador did not achieve the EFA goals for 2015, scoring .909 on the EFA Development Index (EDI), where 1.0 would equal full completion of four of the EFA goals (UNESCO, 2015), which placed it in the middle group of countries according to UNESCO.

There are stark differences between the urban and rural areas of El Salvador; the Ministry of Education calculates that the rural population achieves four years of schooling on average, compared to the urban population's eight years, and has one and a half times the grade repetition rate of urban students (MINED 2009b, p. 9). International testing has revealed that students in rural schools in El Salvador score significantly below students in urban schools (Ganamian, 2009), as discussed in chapter one. The educational achievement in rural areas may lag behind that of urban areas for many reasons. The pervasive poverty in rural areas, and the resulting lack of resources and political power of both the people and the rural schools, pose barriers to the academic achievement of rural people, as does the disruption caused by over a decade of armed

conflict, and the history of inequitable access to education, which prevented some current parents from ever attending school (Gillies, 2010; Marques & Bannon, 2003). The geographic situation of rural schools, which often requires students to walk long distances and/or pay for rides to school on local trucks, further inhibits the ability of all students to receive an education, as the government does not provide transportation to and from schools for students. This study investigates the attitudes of teachers in rural El Salvador, because the lower literacy and school completion rates of rural areas (MINED 2009b), as discussed in chapter one, reveal the urgent need to examine the educational services provided in these schools and attempt to improve the educational achievement for all students in rural El Salvador even more drastically than of students in urban schools.

Site selection. El Salvador is divided into 14 departments, each divided into municipalities. There are 262 municipalities in the country, which consist of both urban and rural communities (Dirección General de Estadística y Censos, 2008). My study focused on teachers from rural schools of the municipality of San Felipe, which I had visited as a teaching assistant for a UMD study abroad course taught by my advisor, and where I already had experience working with rural school children. The department of Hermosillo, where San Felipe is located, has a higher rate of illiteracy than the national average and a higher rate of unemployment and poverty than the national average. Hermosillo's population density is half that of the nation's (Dirección General de Estadística y Censos, 2013, p. 4). While most households in Hermosillo have a television, less than 10% have a computer and still less have access to the internet (Dirección General de Estadística y Censos, 2012). In the census of 2007, Hermosillo

had only three municipalities with populations greater than 10,000 people, one being the department capital, which is about 10 miles down the highway from the center of the municipality of San Felipe.

Because of my previous visits to San Felipe with UMD study abroad trips, I knew members of a local community elected governing council, known throughout El Salvador as the *Asociación de Desarrollo Comunal* (ADESCO) in one of San Felipe's communities. Members of that community's ADESCO provided invaluable assistance in facilitating my visits to all the rural schools of the municipality to conduct research. Because the security situation in El Salvador, my contacts in the local ADESCO introduced me to local residents who accompanied me on my preliminary visits of the rural schools in San Felipe and were crucial in advising and supporting me to safely conduct this study across the various rural communities of the municipality.

The schools are simple concrete structures, often with open windows with bars or screen instead of glass, and the majority have only two or three classrooms and a separated latrine bathroom. Most are only accessible via unmapped dirt roads with no public transportation options. Nine of these schools have classes from first to sixth grade, defined as the first and second cycles of primary school in El Salvador, and three of the schools include all three cycles of primary school, from first through ninth grades (MINED, 2012c). Eight of these schools include preschool classes for children four to six years old as well. Preschool classes are called "*parvularia*." One school includes classes for student three years beyond the ninth grade, referred to as "*escuela media*" in El Salvador.

Participants

I visited each of the 12 primary schools which are designated “rural” by the Ministry of Education in the municipality of San Felipe. These 12 schools are located in small rural communities spread throughout the municipality and have an average of just over four teachers per school (MINED, 2012c). The most current data available from the Ministry of Education states that there are 53 teachers and directors in the rural schools of San Felipe, (MINED, 2012c). I distributed the teacher questionnaire along with the ORI survey to all 53 teachers at the twelve schools, and received completed ORI surveys and questionnaires from 43 out of the total of 53 teachers and directors.

I asked teachers to fill out separate forms with their names and some background information if they would be interested in being interviewed for the study, and 16 gave positive responses. To select teachers for the qualitative component of this study and to maximize variation among the participants interviewed, I used a purposive sampling procedure (Lincoln & Guba, 1985). I chose five teachers and three directors to interview, representing eight schools. Many of the others who volunteered worked in the same schools as those chosen, but I decided not to interview two teachers from any one school, to increase the number of sites represented. However, one teacher was unable to meet me for a second interview and so I conducted the second interview with another teacher from the same school who had been present at the first interview with the original teacher. I conducted interviews with as many willing teachers as I had the time and resources to visit twice during my study. I chose only one director from the two larger rural schools, where the directors do not currently teach but have only administrative duties. The other two directors who were interviewed teach classes in their schools each day. In total, I

interviewed six teachers and three school directors. I ensured a choice of teachers which included those teaching lower and upper grades as well as teachers with a range of years of experience. I chose to interview only two male teachers since males made up about 18% of the local teacher population based on survey response.

The six teachers all had a three-year university degree, called *Profesorado*, which was true for most who responded to the survey. Two of the school directors also had *Profesorado* degrees, while only one had a five-year university degree called a *Licenciatura*. Based on the group who volunteered, this was as close to representative of the surveyed group as possible, in which only eight out of the 43 teachers and directors who completed the survey had a five-year *Licenciatura* degree. Only two teachers who expressed interest in being interviewed had training in disability or inclusion, and they were from the same school, so only one teacher with training was interviewed. Teachers interviewed had from 10 to 34 years of experience working as teachers, and the directors had 15 to 23 years' experience working in the schools, while the range of experience among all those responding to the survey was from 1 to 38 years working in the schools.

The only two teachers who said they had not personally taught a student with a disability were two directors. However there are currently children with disabilities in both of their schools. There is a 14-year old boy with significant learning problems in the first grade class at Rita's school, and there girl who survived a car accident and has difficulties walking as well as some speaking and learning disabilities in the other teacher's class at Julia's school. Maria the one teacher interviewed who had training in disability is an inclusion support teacher or *Docente de Apoyo de Inclusión* (DAI), who helps other teachers in classes from preschool through ninth grade in her school. Julio

and Donna teach at the same school and were interviewed together during a teacher meeting day. Because Julio could not meet a second time Donna was interviewed alone. Rita, the director of a larger school, currently has administrative duties alone while she used to teach preschool classes. I did not have the chance to observe any classes in Rita's school. Julia and Caty are directors of smaller schools and teach classes as well as having administrative responsibilities, which is true in all but two of the 12 rural schools in San Felipe. The basic data for the teachers interviewed is presented in the Table 1 below.

Table 1
Teachers Interviewed

Pseudonym	Gender	Years Teaching	Degree	Position and Grades Taught	Teachers in schools	Students in school
Rita	F	23	Profe. 3yr	Director only	9	230
Julia	F	15	Lic. 5yr	Director, K, 4,5,6	2	71
Caty	F	18	Profe. 3yr	Director, 1-6	3	46
Maria	F	29	Profe. 3yr	K-9 Inclusion support	16	374
Elena	F	34	Profe. 3yr	K -3	2	29
Rosa	F	12	Profe. 3yr	K	5	100
Julio	M	10	Profe. 3yr	5	4	130
Donna	F	18	Profe. 3yr	3,4,6,7	4	130
Héctor	M	14	Profe. 3yr	1,2,3	3	61

Throughout this study, when I refer to the entire group, which includes the directors who have previously taught or are currently teaching, I will refer to the entire group as “teachers.”

Research Design

This study was a mixed methods study, using a translation of a published survey to summarize teacher attitudes toward inclusion, a questionnaire to record demographic details about the teachers as well as answers to two open questions, and individual interviews and observations with some of the teachers to more deeply investigate the beliefs and actions of this group. The first phase was a quantitative study surveying teachers from rural schools in San Felipe, with an imbedded qualitative component of open questions following the teacher questions. This was a universal survey of the rural teachers of San Felipe. The number of surveys was limited by the fact that there are only 53 teachers in this population, as described above. Although this small number does not provide great power for statistical analysis of teacher attitudes, it produced summary statistics for this group of teachers.

The second phase of this study used qualitative methods to explore the perspectives of teachers in the municipality's rural schools through individual interviews. Creswell (2007) states that case study research "involves the study of an issue explored through one or more cases within a bounded system" (p. 73). Observations of teachers were also conducted during this phase of the study. Documents related to the Ministry of Education's inclusion policy and documents which had been provided to teachers and directors regarding inclusion as well as disability were reviewed throughout the study.

Data Collection

I collected the data for this study over a three-month period staying in El Salvador. At the start of the study, I visited each school to present a letter explaining the

study to each director and asking for their permission to return to present the survey to teachers and inquire about interest in being interviewed. All the school directors agreed and signed the letters, which I returned to IRB and I was granted permission to conduct the study. The IRB approval letter can be found in Appendix A. In the first stage I presented and explained a letter of consent along with the survey and the teacher questionnaire to all teachers at each of the rural schools in the municipality. I informed all teachers that if they wanted to participate they could fill out the survey and questionnaire without indicating their name and then return it to me in a sealed envelope, which I provided to maintain anonymity, anytime during the day. The survey consent form, which can be seen in Appendix B, did not need to be signed, but the text explained that a teacher's completion and return of the survey indicated their consent. Teachers were informed that they were not required to return anything but could return a blank survey in a sealed envelope if they did not care to participate, without having to indicate their refusal.

I asked each teacher if they might be interested in participating in interviews with me for this research, and if they expressed interest I provided a separate form, which can be found in Appendix C, to indicate their interest in being interviewed at a later date. The indication of interest form included a short list of demographic questions which were used for purposive sampling to determine which teachers were chosen for interviews. I informed interested teachers that agreeing to be interviewed would require at least one hour outside of school time for the initial interview and at least one more hour on a different day to confirm their responses from the first interview, and also to explore any new questions that had resulted from analysis of the first interview.

In the second stage I returned to schools to conduct interviews with the teachers and directors who had indicated their interest and had been selected using purposive sampling. I also conducted observations of teachers teaching, when granted permission on an observation consent form, which can be found in Appendix D. I conducted several interviews with administrators from the Ministry of Education (MINED), the director of the MINED for the Hermosillo department and the head of the office of inclusion at the national MINED office, in order to strengthen my analysis by understanding the policy of the MINED and how it influences the teachers. I also conducted interviews with officials from three non-government organizations which work in the education field, to explore their perspectives on the current situation for children with disabilities in the schools and any evidence of teacher attitudes toward inclusion they have witnessed. The pseudonyms I use for these organizations are FIDES, which provides teacher training and advocacy for inclusive education across El Salvador, Los Amiguitos which provides therapy for children with disabilities in several departments and Internacional Ayuda which provides after school centers for children in rural communities including one in the municipality of San Felipe. I also conducted an interview with two education professors at a university in San Salvador concerning the general history of education policy and inclusion in El Salvador. All these participants agreed to be interviewed and signed a consent form, which can be found in Appendix E.

Survey. I had Antonak and Larrivee's (1995) *Opinions Relative to Integration of Students with Disabilities (ORI)* survey translated to Spanish for this study, by a native Spanish speaking teacher in Maryland. The survey was pretested with teachers from urban schools in San Felipe, to verify cultural understanding, before use in this study.

The original English ORI as well as the Spanish translation is provided in Appendix F. I distributed the translated survey to all teachers in each school. The ORI survey produced descriptive data to summarize the attitudes toward inclusion of the teachers in San Felipe's rural schools. The survey consists of 25 items which the authors group into four latent variables which they call factors.

In the ORI survey, a revision of the original ORM scale by Larrivee and Cook (1979), Antonak and Larrivee (1995) changed the Likert response scale for each item to six points, in order to eliminate the undecided option (-3 = I disagree very much, -2 = I disagree pretty much, -1 = I disagree a little; +1 = I agree a little, +2 = I agree pretty much, +3 = I agree very much). Items in the survey that presented a statement contrary to the idea of inclusion were reverse coded, so that agreement with the statement was given as a negative value (-1 to -3) and disagreement was counted as a positive value (1 to 3). Those items which were reverse coded are identified in tables, in the results chapter, with the label "(rev. code)." The four factors as well as the ORI total survey are listed in Table 2 with the number of items and scale I calculated for each.

Although Antonak and Larrivee (1995) summed the responses and added a constant to eliminate negative score, I chose not to add that constant and to report the scores of the total survey as well as the four factors within a positive to negative range, where positive numbers indicate a positive attitude toward inclusion and negative number indicate a negative attitude toward inclusion or a reluctance to implement inclusive policy. Therefore the total score for the survey is provided on a scale from -75 to +75 with zero as the midpoint between positive and negative attitude scores.

Table 2

ORI Factor Sections

Factor title	Description (Antonak & Larrivee, 1995)	Number of items	Scale
Benefits of Integration	“the benefits of integration for students with and without disabilities” (p. 144)	8	-24 to +24
Integrated Classroom Management	“the behavior of students in an integrated classroom and classroom management procedures that integration may require” (p. 144)	10	-30 to +30
Perceived Ability to Teach Students with Disabilities	The teachers’ perceptions of their own abilities and the training they have received.	3	-9 to +9
Special Versus Integrated General Education	“a dichotomous view of the provision of education for students with disabilities” (p. 147)	4	-12 to +12
ORI total	“measure attitudes toward the integration into general classrooms of students with disabilities” (p.147)	25	-75 to +75

Teacher Questionnaire. I gave the teachers a self-designed questionnaire, attached to the ORI survey, which asked 10 questions to provide background data in order to analyze how the teachers’ attitudes were related to variables, including their years of experience teaching, degree type, experience with students and family members with disabilities, and the amount of training in disability or inclusion they had completed. The teacher questionnaire is provided in both English and Spanish in Appendix G. The questionnaire also included two open-ended questions regarding the barriers and facilitators to inclusion. These open-ended questions provided the opportunity for all teachers to contribute some qualitative data embedded in the first phase. I stayed at each

school until after classes ended to retrieve the surveys and questionnaires, which were placed by the teachers into the same common envelope mixed with all other surveys. The confidentiality of all surveys was ensured by this process.

Interviews. After purposively choosing teachers to interview, I contacted them and returned to schools to conduct individual interviews with six teachers and three school directors who were willing to contribute their words to a richer and deeper description of the beliefs and attitudes of teachers toward inclusion. I presented an interview consent form, available in Appendix H, to each teacher and asked for their signed approval before conducting all interviews. I conducted open-ended interviews of thirty to forty-five minutes in length with teachers in Spanish, investigating their beliefs about disability and the inclusion of students with disabilities in their classes. I used these interviews to interpret the attitudes of the teachers, and to examine of the needs and challenges which exist in creating inclusive schools across rural El Salvador. I followed an ethnographic method for interviewing individual teachers “to explore the meanings that people ascribe to actions and events in their cultural worlds, expressed in their own language” (Roulston, 2010, p. 19). This provided information that helped to describe rural teachers in El Salvador and their beliefs about disability and their attitudes toward inclusion in their classrooms. I conducted open-ended interviews referring to “a prepared interview guide that includes a number of questions” (Roulston, 2010, p. 15) allowing the teachers to respond to prompts in their own words. I inquired into the teachers’ beliefs as well as their experiences and the training they had received. The interview guide is provided in English as well as Spanish in Appendix I.

Interviews with school directors and Ministry of Education officials involved questions related to the policy of inclusion and the expectations the Ministry has for teachers, as well as the training opportunities which have been offered to teachers. As an outsider with little experience living in rural areas, intending to study the teachers from rural schools, I needed to examine the general culture of this group as well as the policy and the established patterns of behavior that may affect their work with children with disabilities. Interviews with the teachers offered me, the outsider, a way to hear the insiders' descriptions of the reasons and patterns which support their beliefs and behaviors related to inclusion and disability. Interviews with officials from the ministry of Education provided contextual information on the policy of inclusion and services offered through the government. I conducted a second interview with each teacher and school director as well as the Senior Ministry of Education official who works on inclusion to as a follow-up to explore questions that remained unclear from the first interview and provide a check for understanding of themes revealed.

Observations. Teachers who agreed to be interviewed were also asked if they would allow me to observe their teaching. For seven teachers who gave their approval, I observed their teaching, taking notes for 60 to 90 minutes in their classroom to examine teacher interactions with students who exhibit differences or problems learning as well as obvious disabilities. I did not observe classes in only one school, where the director is has only administrative duties. On several occasions at schools where I had interviewed the director or the inclusion support teacher, I got permission to observe a class of a teacher who had not been interviewed for purposes of school context and to observe teaching of a class with a child with a disability. I did not seek to involve myself with

any lessons or activities unless I was asked to, but I spent the entire school day at each school for most visits due to transportation availability. In the course of the days in schools I was sometimes asked to teach a short English language lesson since the students were often eager to learn this. I also helped with clean up tasks and or answered questions asked to me by students, and interacted with students during recess times. My role as a researcher was clearly explained to teachers as well as students in each school, therefore my role could be considered that of observer as participant, as my identity was not hidden (Hesse-Biber & Leavy, 2011). I noted the nature of interaction between the teacher and students who demonstrated problems. I used an observation guide, available in Appendix J, to record notes in each classroom. These notes contributed to my rich description of the environment of the classrooms and schools in which these teachers work to educate children, and provide some evidence of how teachers' attitudes toward student differences may affect their interactions with struggling students.

Document review. Throughout every step of the study, all participants, teachers, directors, Ministry officials, and representatives of non-government organizations were asked for any documents they had access to which could be of use to investigate the knowledge and understanding of the general population as well as education professionals regarding disability and inclusion. Training materials provided to teachers as well as policy documents were of particular interest. The definition of disability which is understood and accepted by the teachers as well as the Ministry of Education was investigated through these methods especially to provide further strength to the analysis of teachers' attitudes.

Data Management and Analysis

Data Management. All ORI surveys were placed together and not reviewed until all were collected. I used a digital recording device to record each open-ended interview. I listened to each interview a second time on the same day of recording to expand on my notes taken during the recording, while the event was still in my recent memory. I found a local Salvadoran, not working for the schools, to transcribe all interviews. I typed field notes from observations and any observer comments into my interview and observation documents on the same day, which were later coded and analyzed alongside the interview transcripts.

Quantitative analysis. Overall summary statistics for the teachers' total score on the ORI survey were calculated as well as summary statistics for each of the four separate factors that are counted in the instrument. I examined the relationship of five independent variables that may influence teachers' attitude toward inclusion: their years of experience teaching, their education degree, their hours of inclusion training, their experience with a student with a disability, and their experience with a friend or family member with a disability. I conducted regression analysis of the five independent variables to examine if any had significant effect on the teachers' attitudes as scored by the ORI survey. I followed the regression analysis with t-tests for groups separated by individual variables: those with training and those without training, those with and without family members with a disability, those with experience teaching children with disabilities and those without, as well as those with a three-year degree compared with those with a five-year degree. When the data did not meet the assumptions for a t-test, I

used the Mann Whitney U test to determine if there was a difference in the two groups' scores. All statistical analysis was conducted using the IBM SPSS, version 22, program.

Qualitative analysis. I listened to interviews, and reviewed notes on the same day as collecting the data in order to begin the process of the data exploration phase (Hesse-Biber & Leavy, 2011) while the data collection experience was still fresh. Transcripts for all interviews were typed into the computer by a local person, I hired, who did not work in the schools. I began working on coding of the interview transcripts, observation notes and my daily research journal while I was still in the process of data collection. I used the Atlas.ti qualitative data analysis software manufactured by Scientific Software Development GmbH (Copyright © 1993), throughout this process of coding all data so that codes could be connected across all data sources, and themes were developed and managed together. All transcripts, notes, and documents were examined at first using a form of open coding (Creswell, 2007) in order to discover and record recurring ideas which were revealed in the text. I reviewed and amended my notes and developed the first draft of preliminary coding, creating a code dictionary in a separate file (Roulston, 2010). As I reviewed more transcripts and developed new codes, they were added to the code dictionary file, and all transcripts were reviewed for all codes in the second round.

The codes which resulted from preliminary analysis of all transcripts and notes were analyzed to develop more complex categories or themes to organize the codes created after all interviews and notes had been reviewed the first time. Themes related to the original research questions as well as any emergent ideas that formed with the convergence of all quantitative and qualitative data were recorded. The literature review

was reexamined to explore any new connections which had emerged.

I hired a Salvadoran professional, who has a *Licenciatura* (five-year university degree) in Education from the National University of El Salvador to review interview transcripts as well as my notes from each interview. Throughout my ongoing analysis while still in country, second interviews with teachers as well as peer debriefing (Mertens, 1998; Lincoln & Guba, 1985) with this professional were used to establish optimal understanding of the study's results. I kept a daily journal throughout the study which served to record the daily logistics, as well as provide important personal reflection on values and growing insights (Lincoln & Guba, 1985) and provide a place for writing memos summarizing findings and implications (Hesse-Biber & Leavy, 2011). This was valuable in managing the ongoing collection of data and in developing my personal understanding of it.

Quality of Research

Validity and Reliability for Quantitative Phase. The validity of the ORI survey has been established in a number of studies included in my literature review, and it was found to be the most commonly used instrument related to inclusion in recent international studies. The ORI was used in studies in three different countries, and the original ORM was used in another three. The original ORM survey developed by Larrivee and Cook (1979) has been used for many years in the United States, as has the updated ORI modified by Antonak and Larrivee (1995). Therefore the wide use of these instruments to measure teacher attitude toward inclusion allows for analysis of my results alongside these recent studies which examined teachers' attitudes in six countries around the world. To address the reliability of the data resulting from this new translation of the

ORI survey, one can consider the original survey's Cronbach's alpha coefficient of 0.88 on the scale of 0 to 1.0 (Antonak & Larrivee, 1995, p.144). The ORI survey produced descriptive data to summarize the attitudes toward inclusion of the teachers in San Felipe's rural schools. A Cronbach's alpha figure was calculated with SPSS for this translation and reported for this sample.

Validity and Trustworthiness. “Many perspectives exist regarding the importance of validation in qualitative research, the definition of it, terms to describe it, and procedures for establishing it” (Creswell, 2007, p. 202). Lincoln and Guba (1985) declare that the trustworthiness of qualitative research requires credibility, transferability, dependability and confirmability, which they relate as the equivalents to internal validity, external validity, reliability and objectivity respectively (p. 300). They list triangulation and peer debriefing as techniques for establishing trustworthiness, thick description for establishing transferability, an audit with audit trail for dependability and confirmability and a reflexive journal as helpful for all these aspects (p. 328).

Validity in qualitative studies and the plethora of different terminologies used by authors from different perspectives is discussed at length by Creswell (2007), who concludes in his summary that he considers “‘validation’ in qualitative research to be an attempt to assess the ‘accuracy’ of the findings, as best described by the researcher and the participants” (p. 206). He goes on to note that he does not believe that ‘validation’ is different for different approaches to qualitative research and that he holds that researchers should employ “validation strategies” (p. 207) to document the accuracy of their work.

Creswell (2007) repeats these techniques when he lists eight validation strategies and recommends that researchers “engage in at least two of them in any given study” (p.

209). He names triangulation from different data sources, and writing thick detailed description, as the most popular and cost-effective strategies used to establish the validity or accuracy of qualitative research. I sought to use these strategies in my study.

Designing a mixed methods study results in methods triangulation (Hesse-Biber & Leavy, 2011) which strengthens the validity of findings evident in both the survey and the interviews. I achieved additional methods triangulation by conducting observations as well as interviews and surveys. In addition to the triangulation of methods, the inclusion of interviews of directors and officials from the Ministry of Education and local non-government education organizations, as well as the review of documents collected provides triangulation across informants, which allows for the voices of more persons with different perspectives to be included in the final analysis. The observation data and field notes from visiting classrooms, also contributes to the use of multiple sources of evidence, which Yin (2009) suggests to establish construct validity in a case study.

While my final dissertation is written in English, a foreign language for all of the participants in my research, I produced a summary draft of my dissertation analysis in Spanish to review with the education professional from The National University of El Salvador before finishing my conclusions to provide her with a chance to clarify or correct any misconceptions present in the analysis.

Using field notes from all observations and interviews, I wrote a thick rich description of both the setting and activities observed in the school, as well as the interviews. I attempted to provide the ideas and beliefs of those interviewed in the most direct translations of their own words that as is possible. I added the most clear descriptions I could of the tone and body language presented throughout the interview in

order to preserve as much of the nonverbal data that is inherent in the interview as possible. In this manner I sought to produce the thick description that Creswell (2007) highlights as a validation strategy and Lincoln and Guba (1985) noted as important for understanding the transferability of inquiries and also as a natural advantage of case study design.

Transferability. Lincoln and Guba (1985) describe transferability as the equivalent to external validity, which deals with the question of whether the results of one study can be applied to other populations (Mertens, 1998). While the quantitative study of a survey in one municipality will not provide statistical power to generalize to all teachers across rural El Salvador, this mixed methods study can be defined as exploratory, as it “seeks to investigate an under researched aspect of social life” (Hesse-Biber, & Leavy, 2011, p. 10). The qualitative data revealed by the interviews in this study produced the only information available regarding the attitudes of El Salvador’s rural teachers toward inclusion. “When case studies are properly undertaken, they should not only fit the specific individual, group, or event studied, but generally provide understanding about similar individuals, groups and events” (Berg, 2001, p. 232). The rich description of the case of rural teachers in San Felipe which this study has produced should be a useful tool for anyone seeking to expand inclusive services in schools across rural El Salvador.

Reflexivity in writing. Creswell (2007) states that the way researchers write is a reflection of their “interpretation based on the cultural, social, gender, class and personal politics” (p. 179) that they bring into their work. Having worked as both a general and special education teacher in classrooms in the United States, and worked in schools in

Guatemala as a Peace Corps volunteer and in education projects in Bangladesh and Pakistan, my research interests and writing are molded by both my struggles to meet the needs of all children in my classroom, and my travels around the globe which brought me face to face with children whose opportunity for education was held back by poverty, discrimination, and disability. I am inspired by the possibilities which remain part of a global campaign for education for all, and yet overwhelmed by the responsibility that must be demanded of every teacher in every village to meet the needs of every child. The goal of my research was to better understand the condition of teachers in rural schools of El Salvador, and their role in the world's responsibility to provide quality education to all children including those with disabilities. I sought to discover and write about strategies which can assist them in this monumental task.

Cultural challenges. Because I am from outside of the country of El Salvador, my analysis of the statements from interviews with teachers may also be affected by some lack of cultural understanding, however I hired a local contact to transcribe the interviews, and discussed my notes from the interview with this person, making sure to inquire about any issues that remained unclear after my second listening to the interviews. Peer debriefing (Mertens, 1998; Lincoln & Guba, 1985) of interview transcripts and my notes with the education professional from the National University of El Salvador reinforced the credibility of my research while I was still in El Salvador. This professional also helped to draft questions for the second interview with teachers after examining the transcript of the first interviews. This provided triangulation by adding another perspective in the notes which I used for analysis, as well as a check for any cultural confusion resulting from my not being a native speaker of Spanish.

Conducting a second interview with each teacher to review any questions from the first interview also provided a check for understanding of themes revealed.

Ethical issues. Teachers were asked to sign a consent to participate form that explained the nature of the research and the way in which confidentiality was maintained. I informed them that they could stop participating at any time. All aspects of the study were approved by the University of Maryland's Internal Review Board (IRB) and a summary of my research plan was presented to officials from the Office of Inclusion in the Ministry of Education in San Salvador as well as to the Director of Education for the Department Hermosillo. The survey and questionnaire did not ask for teacher names, and the survey documents from all schools were placed in the same folder so the surveys remained anonymous. Pseudonyms were assigned for the names of all teachers as well as their schools to be used in all data analysis and reporting, to protect confidentiality (Berg, 2001).

Chapter IV

Research Findings

“In the rural area we are forgotten really. Because we are very far from being an inclusive school, often for lack of resources” (Rita, personal communication, February 18, 2015).

The inclusion of students with disabilities in all regular schools has increased in importance in the years since the FMLN party won the presidency in 2009 and the Ministry of Education began to promote the policy of inclusion (MINED, 2009b). However, Rita, a school director interviewed, stated her frustration with the movement toward inclusion as quoted above. This mixed methods study was conducted to investigate the attitudes of teachers in rural schools in El Salvador toward the inclusion of students with disabilities in their classes.

The following research questions were investigated in this study:

1. How are children with disabilities receiving education services in El Salvador today?
2. What are the teachers’ attitudes toward inclusion of children with disabilities in regular classes?
 - a. What do teachers believe are the facilitators of or barriers to inclusion?
 - b. What do teachers believe about classroom management and peer interaction in an inclusive classroom?

- c. How do teachers perceive their ability to teach children with disabilities?
- 3. How are the teachers' attitudes toward inclusive education for children with disabilities related to the severity of the disability?
- 4. How have teachers been trained for implementation of the inclusive policy of the Ministry of Education?
 - a. How are the teachers' attitudes toward inclusive education influenced by training and or experiences they have had?

A description of the rural schools of San Felipe and narrative descriptions of three of the teachers interviewed are given below. A summary of the quantitative data gathered through distribution of the ORI survey and a teacher questionnaire to all teachers in those rural schools is then provided along with a description of the analysis conducted. The pertinent findings from the survey are presented according to the research questions to which they applied. Seven themes, which cut across the research questions, are then discussed. The qualitative data collected through two primary sources, the open-ended questions from the teacher questionnaire distributed to all teachers, and the interviews conducted with six teachers and three directors from eight schools, are provided in the explanation of each theme. Secondary data from observations of teachers, from interviews with officials outside the schools and from documents collected are presented along with the primary data to provide support and context for these findings. The quantitative data which supports the themes are also discussed under each.

The Rural Schools of San Felipe

Two hours from the busy urban center of San Salvador, a single paved potholed road stretches through the hills and the vast fields of tall green corn at one time of the year and dry emptiness during another. Along the road lies the occasional concrete house covered with rolling red roof tiles, as well as some small adobe structures protected by rusty sheets of metal *lamina*. Twenty minutes before the road comes to the department capital, a concentration of stores, churches and houses, pressed up to the pavement, and a single cement column topped with a statue, mark the entrance to San Felipe's town center. But spread across those fields, beyond hills and along streams are the *cantones*, or rural communities of this municipality. Every path that branches from the main road or highway, is rocky and dusty, and winds around to the small groups of houses, churches and local schools. Very few residents have cars and rely on buses to travel along the main road, but to get to that main road from their communities many must walk close to an hour or in some cases hitch a ride on the back of a pickup which shuttles people and whatever loads they are carrying for a few coins. Most schools are individual concrete buildings of two or three classrooms with metal bars or chain-link instead of glass windows, which allows for the warm air to circulate out of the rooms, but protects the old desks and books from animals or thieves that might explore the school at night. Most rooms have white boards on one or two walls and sturdy metal shelves where they store books. The latest text books are paperback and were received in 2009, and they are usually kept in the school and not sent home with students. The students are given notebooks along with pens and pencils each year in their *paquete escolar*, which began in 2010 under the FMLN party (La Prensa Gráfica, 2015). They use these to copy tasks

from the text books to take home for assignments. The Ministry of Education also provides each school with a quantity of milk, rice and beans which are divided up to parents who take the responsibility of preparing and returning snack to the school on a daily rotation. There is usually a small separate structure which houses latrines for boys and for girls. Some schools pump water from a well to an outdoor sink where the children can wash their hands, while some have tanks where they collect rainwater from the roof.

The municipality of San Felipe includes 14 government schools, which provide classes to students at preschool, primary, or middle school levels. Two of these schools are in the center of the municipality and are designated as urban schools by the Ministry of Education (MINED, 2012c). The remaining 12 schools are designated as rural schools and are spread throughout various *cantones*. Two of the rural schools offer classes from preschool through sixth grade or *Primero Ciclo* as well as classes for seventh through ninth grades or *Segundo Ciclo*, and have a larger number of students (230 and 374) with a full time director who does not teach classes. The rest of the schools have a director who also teaches classes. The two larger schools along with several smaller rural schools offer separate morning and afternoon classes, or *dos turnos*, to different students. The majority of the schools offer a single *turno de classes*, or shift, from 7:30 am to 12 noon. There are usually two break periods or recesses separating the classes and a snack time.

Three of the schools are on the main road which connects the department to the capital of San Salvador, and the other nine schools are accessed by the unpaved roads up to five miles from the highway. The schools range in size from 29 students divided into two classrooms to 374 students over two shifts in the largest school, where a total of 16

teachers work. The six smallest schools only have two teachers who teach mixed grades or *aulas integradas*, usually combining first, second and third grade in one classroom with one teacher, and fourth, fifth and sixth in another. The only computer I saw was in the office of the largest school, and I did not see televisions for educational programming in any classrooms. Students wear uniforms to school, which are provided along with shoes for each student by the Ministry of Education as part of the *paquete escolar* school program. These rural schools have limited resources and are often the only government facility for miles.

The Teachers of San Felipe

There are 53 teachers who work in the rural schools of San Felipe (MINED, 2012c). Most of the teachers have completed a three-year University degree, or *Profesorado* to become a teacher. Seven of the teachers who returned the survey have completed a five-year *Licenciatura* degree from a university. Many live outside the municipality of San Felipe and some commute every day from other departments or even the capital city, two hours away. Many live in the in the department capital, Real (a pseudonym), eight miles down the road. The majority rely on public buses to travel from home and still have to walk or hitch a ride on a local truck to get to their remote schools. The teachers' pay depends on the highest degree they have earned as well as the number of years teaching experience they have, and according to official statistics, ranges from 567 dollars per month for a first year teacher with a three-year degree to 1020 dollars per month for a teacher with a five-year degree and over 35 years' experience (ANDES, 2014). In all but the two largest schools, the director also teaches classes every day at the school. Less than a quarter of teachers had experience with disability in their family,

while 27 of the 43 teachers who completed the survey indicated that they had experience teaching children with disabilities. I have provided narratives describing three of the teachers interviewed below. I chose one director who also teaches as well as a male and a female teacher from different schools to provide a better understanding of the variety and similarity of participants.

Hector. I waited for a flatbed truck which leaves before seven a.m. to wind 20 minutes up the dirt road to pick up adolescents from the villages and bring them back to the middle school along the main highway. I rode out to the village primary school on this truck to visit Hector, but there were no students in the school that morning as there was no roof on the building. "We're having class in the *cancha* (field)" called Hector, from the side of the soccer field which is a short walk down the hill from the school. There were two tents or canopies already standing up there and all the students' desks were stacked up behind the fence in someone's yard. The students had no trouble getting them out and lining them up. I assume they had done the same thing the previous day. This is a small school with just over 40 students from pre-k to sixth grade. Today there was a substitute for the pre-k teacher, who is on maternity leave, but another teacher had gotten ill this week. So the remaining teacher, Hector, had to teach all of the students, grades 1-6, usually divided into two classes. He went back and forth between the two groups to instruct them, and attached his lessons to a tree.

Hector enjoys working and sharing knowledge with children. He normally teaches a combined class of grades one, two and three in this small school about three miles from the main highway. He is proud to have saved for a motorcycle which he uses to make a nearly half hour trip to get to school each morning from the department capital

where he lives. Hector has two teen daughters who are in school, and a wife who is working at home. The civil war ended when Hector was still a teenager. He said that of all of his friends, only three were not forced into the army during the war. Although the city he lived in was fairly safe as it was not a major conflict zone, he remembers having to run and hide when the army was “recruiting.” After the war he earned his three-year *Profesorado* degree, at a local university. He studied in a weekend program while he worked during the week in shoe repair and carpentry. He did not always want to be a teacher, but this program gave an opportunity for a career here where he lived. There was a need for teachers in rural schools and he was one of the few to get the opportunity to work before graduating. He taught in a parent run EDUCO school in a very distant community, over one hour walking from where he got off the bus, thirty minutes from the city. At that time he wanted to teach social studies to older kids but the opportunity came to work with *parvulos* or preschoolers, so he took the job.

After eight years working in the distant rural school, Hector decided to go to the United States. He spent eight years living in Virginia and Maryland working in construction, and sent money home to his wife. He returned to El Salvador in 2009 when his father was dying of cancer. He started with a temporary job at his current school and in 2011 he got an official teacher position there. Hector feels that his attitude regarding disability is a product of his experience with friends who were injured during the conflict in El Salvador. He has friends who were injured and lost their vision or had an arm amputated or lost their ability to walk. Most of these friends were further affected by the trauma and have had troubles with drugs and alcohol. Hector says that it is in his power to find a way to help those with more problems. He once had a boy who had lost a finger

in an accident and always hid his hand in his pocket. One day the boy took his hand out and Hector saw he had lost part of his finger. Hector started to play with him and showed him that this was not a big problem. It was his left hand so he wrote with his right hand. Hector fondly remembers teaching this boy and helping him to manage despite the difficulty of his injury.

As a teacher Hector earns enough money to live, but not much more. He cannot go on vacations, he says, but his family has the basics of life. He bought his motorcycle on credit after saving money when he was single. He has worked for 15 years as a teacher, for five years in this school. Hector likes to work in this rural school, as he explained:

In this community the problems of delinquents and violence have not arrived. The kids are spontaneous. They say what they think, if they are bad you see it. This is the difference. It is delicate to teach not just how to read but how to behave. To know the value of things and that we are all under the same God. I like to work with them, and I like to work in the rural area. You see the poverty and necessity but you see the purity of the children. (Hector, personal communication, April 9, 2015)

Elena. I met with Elena on the side of the road where she gets off the bus early in the morning. She guided me on the second part of her hour long daily journey as we walked across corn fields and slid through gaps in the fences to arrive on a dusty rocky path that we followed up a short hill to get to her school.

Elena has taught in rural schools for 32 years and was the director of her school for over 10 years while also teaching early elementary grades. She has always had the vocation to teach, from the time she was little, playing with her friends. Elena lived in another department and studied for three years to earn her *profesorado* degree and become a teacher. She now lives in the departmental capital with her husband, her mother, her sisters, her nephews, and her two children, one of whom is in university and the other one is in ninth grade.

Elena currently teaches a mixed grade class including first, second and third grade together, which is common in the small rural schools of El Salvador. Her school used to have a preschool classroom, but currently does not have enough preschool aged children to earn government support for a preschool teacher. Elena, however, feels that the school should provide support to children to prepare them to start primary school, so she has allowed children younger than seven to come each day to work on preschool skills in her classroom. She told me that she had three students last year in this group and now has one boy who is in her classroom getting ready to start first grade next year. Additionally, Elena has one child in her class who has an evident intellectual disability, though she has never received a medical or psychological diagnosis. This child is eight years old and speaks like a younger child, and is not able to read or write. Therefore Elena has four separate academic groups in her one classroom and busily moves from one group to the next to provide direct appropriate learning activities to each.

In the afternoon Elena teaches dance to grades one through nine at the school which is part of a new program named *Escuela Inclusiva de Tiempo Pleno (EITP)*, or full time inclusive school, in the municipality's urban center. In this program the students

attend morning academic classes and have art and culture classes in the afternoon. Elena never studied dance but always liked going to dances with her brothers when she was young. She teaches folkloric dance, but she says it is difficult to get the older children to learn dance. Elena commented that it would be good to be able educate children with disabilities in the community where they lived “because to take them to a special school is really difficult, and there is the cost and the time to take them there when the mother has work to do at home...”

Julia. Julia lives just down the street from the school where she works, but there was no school here 15 years ago. She went to the Ministry of Education to ask for a school in her community, and they asked her to wait. Parents helped Julia to form the school through the *EDUCO* program, which organized rural schools led by committees of parents. She started teaching children in someone’s house, sitting on the floor with no desks. She borrowed desks from the *Casa de Cultura* or local culture library, for one year before getting their own desks. The local parent group got the land for the school donated and they received help to build the school from Plan International. The school is now part of the *Consejo Directivo Escolar (CDE)* Program which replaced the parent run *EDUCO program* for rural schools but retains a parent committee. Julia showed me that since the school was built on the side of a steep hill, there are many steps and her classroom is several steps up from the road, and the other classroom and the latrine are many steps up from hers. She pointed out that this would be nearly impossible to manage for a student with a wheel chair.

Julia is the director of the school and teaches preschool in the morning and later a combined fourth, fifth and sixth grade class in the afternoon shift. She lives in her

parents' house with her husband, who is also a teacher, and her two children, a two-year old daughter and a son who currently is a student in her school. Julia studied to become a teacher at a religious school in a neighboring department, and later worked on her five-year university degree or *Licenciatura* on weekends in San Salvador. Even though she was told that teachers do not earn much, this was not important to her. Julia is taken by the innocence of little children and she notes that all people, and all professionals, pass through the hands of a teacher.

She says that she has never taught a child with a diagnosed disability, but a girl in her school was in an auto accident that affected her ability to walk without support and slowed her intellectual processing. The girl is currently in the other teacher's second grade class, but is older than her classmates as the accident kept her out of school for a while. Julia is very proud of her fellow teacher, Victoria, who has nurtured the injured girl in class since her accident. She says that the girl has shown great development, and is learning within the normal expectations in this regular school, thanks to the efforts of Victoria.

Quantitative Survey Data.

Teacher attitudes toward inclusion of children with disabilities was first investigated for all teachers working in rural schools in San Felipe using the ORI survey. Forty-three of 53 teachers returned the survey (Appendix F) along with the attached teacher questionnaire (Appendix G). A total score for the ORI and scores for the four factors described by Antonak and Larrivee (1995) were calculated for each teacher. A Cronbach's alpha statistic for internal consistency of $\alpha=.563$ was calculated for the ORI

total in this study. The Cronbach's alpha for each factor's scores is reported in Table 3 below. The value range of the alpha is 0 to 1.0, where 1.0 would indicate perfect consistency. These low values of internal consistency may be a result of the small sample size.

The mean for the total ORI score for all the teachers who responded in San Felipe was 3.33 on a scale from -75 to 75, indicating a neutral value. On the four factors, the teachers' attitudes were positive on the ORI survey for "Benefits of Integration" (10.44), and neutral or just above zero for "Integrated Classroom Management" (2.33), but negative for "Perceived Ability to Teach Students with Disabilities" (-4.70) and for "Special Versus Integrated General Education" (-4.74). The positive means represent positive attitudes toward inclusion and negative numbers represent negative attitudes. The means, scales and standard deviation for the ORI scale and each of the factors can be examined in Table 3 below.

Table 3

Statistics for ORI total and four factors

	Min.	Max	Mean	Scale	Std. Deviation	Cronbach alpha
ORI Survey Total score	-22	41	3.33	-75 to +75	15.314	.563
Benefits of Integration	-5	24	10.44	-24 to +24	6.352	.263
Integrated Class Management	-14	16	2.33	-30 to +30	7.495	.194
Perceived Ability to Teach Students with Disabilities	-9	9	-4.70	-9 to +9	4.262	.550
Special vs Integrated General Education	-12	3	-4.74	-12 to +12	4.408	.260

To address question 4(a), a multiple regression analysis was run to examine the influence of each of these five predictor variables on the total ORI score as well as each of the four factor scores. Those variables were: number of years teaching, the teachers' university degrees, the number of children with disabilities the teachers had worked with, the number of friends or family with a disability the teachers had, and the number of hours in training related to inclusion or disability the teachers had completed. The data for the ORI results and these variables did not appear to violate any of the assumptions for regression analysis with no significant outliers and the predictor variables were not highly correlated with each other. Results of the regression analysis are provided in the Table 4 below. In the this table, B is the value of the unstandardized regression coefficient, indicating the change in survey score for each unit of change in the variable, while SE B is the standard error of the coefficient. The *p* value for each coefficient is given under the column labeled Sig. for significance. Further statistical tests were conducted to examine the influence of these variables. Details related to those tests as well as items and factors are described in detail in Table 4; and described with respect to each relevant research questions below. I set the value of $p < .05$ to determine significance for statistical tests in this study.

The regression analysis does not indicate that these variables are good predictors for the ORI total score or any of its four factors; it is likely the small sample size limited the power of this analysis (Field, 2009). The *R* squared or proportion of variance in the dependent variable that can be explained by each predictor variable was less than 10% for the ORI total score as well as for three of the factor scores: "Benefits of Integration,"

“Integrated Classroom Management,” and “Special versus Integrated General education.”

The regression equation for the factor of “Perceived Ability to Teach Students with Disabilities” revealed an R squared of .226, indicating that these variables explained 22.6% of the variance in the factor score. The estimated coefficient that was statistically significantly different from zero was for Inclusion Training Hours in the regression for the factor “Perceived Ability to Teach Students with Disabilities” ($B = 0.097, p = .008$), indicating that more training increased teachers’ perceived ability to teach students with disabilities. None of the other coefficients revealed significant contribution ($p < .05$) to the total ORI score or any of the four factors

Table 4

Simultaneous Regression Analysis for Variables predicting ORI total and Factor scores (N=43)

	ORI total		Benefits of Integration		Integrated Classroom Management		Perceived Ability to Teach Students with Disabilities		Special vs Integrated General Education	
Variable	B (SE B)	Sig.	B (SE B)	Sig.	B (SE B)	Sig.	B (SE B)	Sig.	B (SE B)	Sig.
(Constant)	4.39 (8.626)	.614	9.813 (3.572)	.009	2.323 (4.269)	.590	-3.984 (2.189)	.077	-3.760 (2.467)	.136
Years Teaching	-0.134 (0.315)	.673	0.142 (0.130)	.282	-0.124 (.156)	.426	-0.048 (0.080)	.549	-0.103 (0.090)	.258
Degree	1.759 (6.192)	.284	-1.464 (2.564)	.572	1.871 (3.094)	.545	0.758 (1.572)	.632	0.593 (1.771)	.740
Inclusion training hours	0.220 (0.136)	.115	0.027 (0.056)	.640	0.060 (.067)	.377	0.097 (0.035)	.008	0.036 (0.039)	.367
Disabled Students	-0.882 (1.773)	.622	-0.751 (0.734)	.313	0.342 (.878)	.699	-0.780 (0.450)	.091	0.306 (0.507)	.550
Disabled Family	0.648 (1.552)	.679	0.527 (0.643)	.418	-.206 (.768)	.790	0.753 (0.394)	.064	-0.426 (0.444)	.344
R ²	.069		.072		.048		.226		.081	
F for change in R ²	.550		.576		.376		2.160		.652	

Quantitative Findings for Research Questions

Attitude toward inclusion. The second research was focused on teachers' attitudes toward the inclusion of children with disabilities in regular classes. Table 5 indicates which items elicited the strongest reaction from the teachers, specifically, the five ORI survey items with the most positive means and the five with the most negative means from this sample. The possible responses range from negative three to positive three. Four of the five most positive means were for items from the first factor, "Benefits of Integration." Teachers showed the most positive mean for agreement with item 21, "Students with disabilities should be given every opportunity to function in the general classroom where possible." This attitude was clearly supported in subsequent open-ended interviews, when teachers expressed their support for the policy of inclusion. Teachers also showed considerable agreement with item three, "Inclusion offers mixed group interaction that will foster understanding and acceptance of differences among students." Teachers disagreed with item 12, the reverse coded statement "The behavior of students with disabilities will set a bad example for students without disabilities," resulting in a positive mean of 1.93. This statement was the only very positive mean from factor two, "Integrated Classroom Management."

Table 5

ORI Item means

Item number and factor	Item mean	Item text
Most Positive items		
# 21, factor 1	2.44	Students with disabilities should be given every opportunity to function in the general classroom where possible.
# 3, factor 1	2.09	Inclusion offers mixed group interaction that will foster understanding and acceptance of differences among students.
#12, factor 2 (rev. code)	1.93	The behavior of students with disabilities will set a bad example for students without disabilities.
#7, factor 1	1.51	The challenge of being in a general classroom will promote the academic growth of the student with a disability.
#17, factor 1	1.47	The inclusion of students with disabilities can be beneficial for students without disabilities.
Most negative items		
# 2, factor 3 (rev. code)	-2.05	Inclusion of students with disabilities will necessitate extensive retraining of general classroom teachers.
#8, factor 4 (rev. code)	-1.95	Inclusion of students with disabilities will require significant changes in classroom procedures.
#19, factor 3	-1.95	General classroom teachers have sufficient training to teach students with disabilities.
#23, factor 4 (rev. code)	-1.86	Teaching students with disabilities is better done by teachers in a special class than by teachers in a general education classroom.
#4, factor 2 (rev. code)	-1.00	It is likely that a student with a disability will exhibit behavior problems in a general classroom.

Note. Factor 1= "Benefits of Integration"

Factor 2 = "Integrated Classroom Management"

Factor 3 = "Perceived Ability to Teach Students with Disabilities"

Factor 4 = "Special Versus Integrated General Education"

Two of the five items that revealed the most negative means were from factor three, “Perceived Ability to Teach Students with Disabilities,” and both related to teacher training. Two of the other most negative means resulted for items from factor four, “Special Versus Integrated General Education,” revealing the teachers’ opinions that there are some advantages of separated education for children with disabilities, which was also supported by their responses during qualitative interviews. The fifth most negative mean came from the item that read “It is likely that a student with a disability will exhibit behavior problems in a general classroom.” This item was in the “Integrated Classroom Management” factor, yet the total score for all items in this factor was positive.

The teachers were most positive on items from the first factor, “Benefits of Integration,” resulting in a mean for the factor sum of 10.44 on the scale from -24 to +24. As stated above, four of the five highest item means were from this factor. Table 6 below presents the mean and standard deviation for each of the eight items under this factor. Teacher interviews revealed positive attitudes regarding the benefits of inclusion, which supports the results of this survey. The items from the “Benefits of Integration” factor are presented in Table 6 below.

Table 6

Benefits of Integration Factor

ORI survey Item	Mean	Standard Deviation
3. Inclusion offers mixed group interaction that will foster understanding and acceptance of differences among students	2.09	1.571
7. The challenge of being in a general classroom will promote the academic growth of the student with a disability	1.51	1.944
11. The presence of students with disabilities will not promote acceptance of differences on the part of students without disabilities. (rev. coded)	-0.02	2.231
14. Inclusion of the student with a disability will not promote his or her social independence. (rev. coded)	0.98	2.198
17. The inclusion of students with disabilities can be beneficial for students without disabilities.	1.47	1.777
20. Inclusion will likely have a negative effect on the emotional development of the student with a disability. (rev. coded)	0.56	2.323
21. Students with disabilities should be given every opportunity to function in the general classroom where possible.	2.44	1.119
24. Isolation in a special classroom has a beneficial effect on the social and emotional development of the student with a disability. (rev. coded)	1.28	2.271

Note. -3 = I disagree very much, +3 = I agree very much

Classroom management. The second factor of the ORI survey explored teacher' beliefs about classroom management and peer interactions (research question 2(-b). Antonak and Larrivee (1995) define the factor as "Integrated Classroom Management," which includes 10 items concerned with "the behavior of the students in an integrated

classroom and classroom management procedures that integration may require” (Antonak & Larrivee, 1995, p. 144) and is calculated from the sum of those items on the scale resulting in a number from - 24 to +24 where the negative sums show a negative attitude toward inclusion and the positive sums show a positive attitude toward the challenges of classroom management in an inclusive classroom.

The mean score of this factor on the ORI survey of my sample was 2.33, which is mathematically positive but below the value of 10 which would result from the choice of “I agree a little” to each of the items, and therefore indicates a neutral attitude. The sample mean for six of the items was positive and four were negative. The teachers scored most positively on item 12, which read “The behavior of students with disabilities will set a bad example for students without disabilities.” This item was negatively coded so the teachers’ disagreement with this item resulted in a positive mean score of 1.93 on the individual scale from -3 to +3, where +3 would count as the most positive attitude toward inclusion. The statement “Most students with disabilities will make an adequate attempt to complete their assignments” was the second most positively scored item under the class management factor by the teachers. The mean for this item was 1.35, falling between 1 (“agree a little”) and 2 (“agree pretty much”). The most negative item score for classroom management was item four, “It is likely that the student with a disability will exhibit behavior problems in a general classroom.” This was a reverse coded item, so teachers’ slight agreement produced the most negative score of -1.00 of this factor. The second most negatively scored item in the classroom management factor came from teachers showing a slight agreement with reverse coded item nine which read “Increased freedom in the general classroom creates too much confusion for the students with a

disability,” resulting in a mean of -0.72 for this sample. The Cronbach’s alpha measure for internal consistency for this factor, was low, $\alpha = .194$. The items from the “classroom management” factor are presented in Table 7 below.

Table 7

Integrated Classroom Management factor items

ORI Survey Item	Mean	Standard Deviation
1. Most students with disabilities will make an adequate attempt to complete their assignments.	1.35	2.092
4. It is likely that the student with a disability will exhibit behavior problems in a general classroom. (rev. coded)	-1.00	1.690
6. The extra attention students with disabilities require will be to the detriment of the other students. (rev. coded)	-0.16	2.058
9. Increased freedom in the general classroom creates too much confusion for the student with a disability. (rev. coded)	-0.72	1.992
12. The behavior of students with disabilities will set a bad example for students without disabilities. (rev. coded)	1.93	1.682
15. It is not more difficult to maintain order in a general classroom that contains a student with a disability than in one that does not contain a student with a disability.	0.07	2.261
16. Students with disabilities will not monopolize the general-classroom teacher's time.	-0.47	2.164
18. Students with disabilities are likely to create confusion in the general classroom. (rev. coded)	0.84	2.203
22. The classroom behavior of the student with a disability generally does not require more patience from the teacher than does the classroom behavior of the student without a disability.	0.05	2.535
25. The student with a disability will not be socially isolated in the general classroom.	0.40	2.499

Note. -3 = I disagree very much, +3 = I agree very much

Data from the survey suggests that teachers thought it was likely that children with disabilities would exhibit behavior problems in the classroom. However, their disagreement with the statement that behavior of students with disabilities would “set a bad example for others” in item 12 was supported by their slight disagreement with item 18, which stated “Students with disabilities are likely to create confusion in the general classroom.” Overall it appears that teachers believe that students with disabilities will exhibit behavior problems and therefore will not get the optimal education in a general education classroom. However, they do not fear that these behavior problems will greatly affect students without disabilities or general classroom management. There seems to be more of an idea that inclusion will cause confusion for the child with a disability than it will for the children without disabilities, an idea that was supported in the interviews.

Perceived Ability. On the ORI survey the third factor included three items on the scale that relate to teachers’ “Perceived Ability to Teach Students with Disabilities” (research question 2(c)). The factor score is calculated from the sum of the three items, resulting in a number from negative nine to positive nine, where zero represents the midpoint between scores signifying a negative attitude regarding the teachers’ ability in an inclusive classroom and those indicating a positive attitude toward this aspect of inclusion. The mean score for this factor was -4.70, or negative on the scale from -9 to +9. Item 10, which specifically asks if teachers have the “ability necessary to work with students with disabilities,” was slightly negative with a mean of -0.56. The other two items which both relate to teacher training revealed means considerably more negative, or

contrary to inclusion. The mean and standard deviation for each of the three items was negative and can be examined in Table 8 below.

Table 8

Perceived Ability to Teach Students with Disabilities factor items

ORI Survey Item	Mean	Standard Deviation
2. Inclusion of students with disabilities will necessitate extensive retraining of general classroom teachers. (rev. coded)	-2.05	1.927
10. General-classroom teachers have the ability necessary to work with students with disabilities.	-0.56	2.383
19. General-classroom teachers have sufficient training to teach students with disabilities.	-1.95	1.838

Note. -3 = I disagree very much, +3 = I agree very much

The last factor on the ORI comprised four items that gave the teachers choices between “Separate versus Integrated Education” for providing the best services to children with disabilities. This factor can be associated with all three parts of the second research question, the facilitators and barriers of inclusion, classroom management, and teacher ability to teach children with disabilities, and is also discussed in the interview data below. For these four items a factor score from -12 to +12 is calculated, where zero is the midpoint between the lower number representing a preference for separate education and the higher numbers showing a preference for inclusion. The mean score for factor four was -4.74, signifying a negative attitude toward inclusion, or some preference for separate education programs for children with disabilities, a theme which was also revealed in interviews. Table 9 presents the means for each of the factors’ four items.

Table 9

Separate versus Integrated education factor items

ORI Survey Item	Mean	Standard Deviation
5. Students with disabilities can best be served in general classrooms.	-0.49	2.229
8. Inclusion of students with disabilities will require significant changes in general classroom procedures. (rev. coded)	-1.95	1.479
13. The student with a disability will probably develop academic skills more rapidly in a general classroom than in a special classroom.	-0.53	2.240
23. Teaching students with disabilities is better done by special- than by general-classroom teachers. (rev. coded)	-1.86	1.872

Note. -3 = I disagree very much, +3 = I agree very much

Influenced of training and experience. A regression analysis of the ORI survey and responses from the teacher questionnaire was used to address research question 4(a) which focused on how training and experienced affected teacher attitudes. This analysis showed training as the only background factor examined that had a close to significant effect on teacher attitude on the scale ($B = .220, p = .115$). This provided reason for further analysis of this variable. The variables for teachers' years teaching, university degree, experience with students with disabilities and for experience with family with disabilities were not found to be significant predictors of the ORI total or any of the four factor scores. For the "Perceived Ability to Teach Children with Disabilities," the regression analysis revealed the training variable as having a positive correlation with the factor score and the only statistically significant coefficient ($B = .097, p = .008$). Therefore I conducted a *t*-test to determine if the total ORI score as well as each of the factor scores were different for the group of teachers with inclusion or disability training

(n=7) and the group without (n=36). Eight of the 43 teachers indicated they had received training, but one of those appeared to have misinterpreted the question, since he named his school as the place of his 100 hours of training, and an interview with the director of his school revealed that no training was ever held in that school. I assume that he meant that he had provided 100 hours of teaching to a child with a disability, as he did indicate experience working with a student with a disability. He was therefore not counted in the group that had received training. This leaves a group of seven teachers who had received training for inclusion and 36 teachers who responded that they had no training for inclusion or left the question blank. I assumed that those who left the question blank had received no training, and were counted with that group.

The data for the ORI total score did not meet all of the assumptions for the *t*-test. The scale score provides a continuous dependent variable, and the independent variable of training creates two independent groups of teachers, which provided independence of observation as each score represents a different teacher. The scores for both groups were normally distributed as assessed by the Shapiro-Wilk's test ($p > .05$) and there was homogeneity of variance, as assessed by Levene's test for equality of variance ($p = .48$). However, there was one outlier apparent in the boxplot of the scores, Case 14. A *t*-test was conducted retaining the outlier, and the data are presented as mean \pm standard deviation. The ORI score increased from the group without training (2.47 ± 14.64) to the group with training (7.71 ± 19.09) but there was no statistically significant difference in the ORI score between the two groups, ($t(41) = -.83, p = .41$). The lack of statistical significance was due to the high standard deviation and was likely a result of the small sample size. The four factor scores also did not reveal significant differences for the

groups with and without training. After eliminating case 14, the new t -test still showed no significant difference in ORI total or three of the factor scores for the two groups. The t -test for the “Perceived Ability to Teach Children with Disabilities” factor score, while not meeting all t -test assumptions, indicated a difference between the groups based on training close to significant ($t(41) = -1.89, p = .07$). There was one outlier, case 2, and the data for teachers without training was not normally distributed, as assessed by the Shapiro-Wilke’s test ($p = .00$).

Since the data did not fully meet the assumptions of the t -test, the Mann-Whitney U test, a non-parametric test which is not affected by the outliers, was conducted. The study design met the assumptions for the Mann Whitney U test, which is used to determine if there is a difference in the median of the two groups. The Mann-Whitney test did not show a significant difference for the ORI total score or any of the four factors between the group with training and the group without.

The number of teachers completing the survey who had family with disabilities was 10, while the number who had taught students with disabilities was 27 out of the 43 total. Three different t -tests were conducted to investigate the difference in ORI scores for teachers with experience of family with disabilities compared to those without, as well as for teachers with experience with students with disabilities compared to those without, and for those teachers with a three-year *Profesorado* degree compared to those with a five-year *Licenciatura* degree. While the data did not meet all of the assumptions for t -tests, with some outliers and violations of normality, there was no evidence to imply significant differences for groups separated by these variables. In order to eliminate the problems of the failed assumptions, Mann-Whitney U tests were conducted to compare

each of these groups as well, but these tests did not indicate any significant difference for the groups separated by these three variables.

Qualitative Data Analysis

All qualitative data were coded and analyzed together and shared with an education professional for peer debriefing. Similar codes were grouped into categories. I analyzed these categories along with the quantitative results from the survey to examine how they related to the research questions. I reviewed all qualitative and quantitative data for answers to those questions and found seven major themes which cut across the research questions and summarized the important discoveries of this study. As explained in chapter three the primary qualitative data for this investigation was collected via interviews with six teachers and three directors from eight rural schools, as well as two open-ended questions at the end of the teacher questionnaire collected from 43 teachers from all 12 rural schools in San Felipe. Those questions asked teachers to write about barriers and facilitators to inclusive education in two open-ended questions. A fault in the translation of my questionnaire resulted in the question reading “What aspects could contribute to inclusion of a child with disabilities in El Salvador?” Instead of my intended “what are the current aspects of the system which contribute to inclusion?” In some cases therefore teachers responded with some answers to this question which describe conditions that may not exist currently but which they believe could contribute to inclusion. These were examined alongside of the interview transcripts and are included in the themes below.

Themes Revealed from the Research.

The analysis of the quantitative and qualitative data in this study reveals the following important themes which cut across the research questions. Table 10 explains how the research questions were included in these themes. Each of these themes is described with details from the qualitative data below.

Table 10

Research questions covered by themes

Theme	Research Questions
Theme 1: Some children with disabilities are not in school and those enrolled with mild disabilities are not always getting needed services.	1, 3
Theme 2: Teachers agreed with the philosophy of inclusion but believed that some children with disabilities would receive a better education in special schools.	2, 3
Theme 3: Teachers are not concerned about classroom management or peer interaction in an inclusive classroom.	2b
Theme 4: Teachers need training	2a, 2c, 4
Theme 5: A lack of resources, including materials and personnel, is a major barrier to inclusion	2a, 2c
Theme 6: Teachers' attitudes were consistent regardless of family or professional experience and inclusion training levels.	4a
Theme 7: Teachers are concerned about the role of family support for children with disabilities	2a

Theme 1: Some children with disabilities are not in school and those enrolled with mild disabilities are not always getting needed services.

We are aware that there are a number of children, in the communities that do not go to school really. . . in families a child with a disability is seen as something rare, something strange and they must be hidden, really, and must be guarded. (T. Diego, personal communication, February 17, 2015)

The above statement from an official from the national office of inclusion at the Ministry of Education (MINED), indicated awareness at the national level of children with disabilities who are out of school, when he was interviewed regarding the first research question. No official numbers are published estimating the number of children with disabilities in El Salvador who are not in school, yet the official number of children with disabilities in the school system is quite low in comparison to international estimates of prevalence. MINED (2014) currently reports that 16,309 children with disabilities were enrolled in the nation's schools in 2013, out of a total student population of 1,720,639, or slightly less than one percent. This number is a large increase from the data reported in chapter one for 2011, but can be interpreted as very low compared to expected prevalence. While some estimates vary, the World Health Organization estimates that a much larger percent, about 15% of people in the world, live with some form of disability (WHO & World Bank, 2011). There are no numbers available for children with disabilities out of schools but the Ministry of Education acknowledges a need to enroll more children with disabilities and intends to do so in regular schools.

In El Salvador, 3043 students are reported to be in special education (MINED, 2014 p. 8-9). It can be assumed that this number is referring to special schools since special education is described as a “level” in a table where the other “levels” listed are age groups (i.e. preschool, primary, secondary etc.). This number is over 18 percent of the total number of students with disabilities reported above to be enrolled in the system. There are currently only 30 special schools in El Salvador (T. Diego, personal communication, February 17, 2015) and they are mainly in urban areas.

The director of the special school in the department capital of Hermosillo, which serves 45 children most of whom have intellectual disabilities, informed me that there are many children with disabilities who do not go to school because their parents do not accept their disability or because of economic issues. There is no transportation provided for children to the special school and it is difficult or costly for children who do not live in the department capital to arrive every day. There is only one other special school in the department, in another major town.

The MINED began a program named *Docentes de Apoyo de Inclusión* (DAI) in 2013 which has trained almost 200 teacher to be inclusion support teachers in approximately 150 schools (Diego, T, personal communication, February 17, 2015). These teachers are responsible for providing advice and assistance to regular teachers regarding the inclusion of children with disabilities. The Ministry is currently in the process of trying to expand the DAI program to replace the previous program of *Aulas de Apoyo*, resource rooms with special teachers providing separate help to some students, which still exist in some schools. Last year the Ministry of Education created positions for three inclusion support teachers in San Felipe. Maria, the only one who is in a rural

school, was interviewed for this study. The other two are in urban schools in the municipality's town center.

The Ministry is also piloting a new program of 1500 *Escuelas Inclusivas de Tiempo Pleno (EITP)*, or full time inclusive schools, that will concentrate resources in these full day schools with afternoon enrichment classes to provide better services to students. Some of these schools have an inclusion support teacher. There is one EITP school in San Felipe but it is an urban school in the town center.

I observed teachers working with students with disabilities or significant learning problems in six of the eight schools where I interviewed teachers. These observations were in regular classes, as well as in a resource room where the one inclusion support teacher, or DAI, sometimes provides separate help to students. The teachers interviewed acknowledged that there may be some children with disabilities who do not go to school in El Salvador. However, they were reluctant to say there were any in their own rural communities. When asked if there were children with disabilities who don't go to school in El Salvador, one school director, Caty, said:

It may happen in some places. Although now ...with the program . . . the messages of the government of the Ministry of Education to send these children to school, very few children remain this way, without learning. Yes I feel there are very few, because even though the school is not ready, we are not ready, we have not received training to deal with such children, they are always welcomed and received. (Caty, personal communication, February 23, 2015)

Rita, another school director, blamed the parents of the children not going to school, saying that in some cases of children with disabilities, the parents don't send them to school, but said "not in my community no, that's the truth, but in some other places, they do not send children to school . . . violating their right to education." I interviewed a doctor at the local government health clinic in the municipality of San Felipe who provided data from local health promoters who visit rural communities. He knew of seven children with disabilities in those communities, of whom four went to school and three did not, but he admitted that there were not currently health promoters available for every rural community and therefore there was no data for several communities (G. Juarez, personal communication, March 4, 2015). Official numbers for children with diagnosed disabilities in San Felipe are not available and there is no established system for finding and diagnosing children with disabilities. The general absence of professionals like school psychologists to conduct diagnoses and the lack of specific disability definitions or access to instruments for evaluation available to teachers was immediately evident in the rural schools of El Salvador.

In part, an interpretation of MINED's numbers requires an understanding of the way that children with mild disabilities are defined and treated within the school system. Children with less severe or mild disabilities are often enrolled in regular schools but are not usually diagnosed or counted in statistics for children with disabilities. Therefore, mild disabilities have been overlooked, and these children do not receive services prescribed by the Ministry. All teachers interviewed indicated they had experience working with students with significant learning or language problems which required attention different from the average students. However, the teachers responded that these

problems were not considered *disacpacidades* or disabilities. Although these two conditions may not be defined as disabilities by teachers in El Salvador and are not identified as disabilities for purposes of statistical reporting at the national level (MINED, 2015) as they are in the United States (Individuals With Disabilities Education Act, 2004), teachers did recognize that the needs of these children were different from others.

A book provided to teachers in El Salvador for the school census, *Libro de Registro*, specifies 10 categories and a short description of each, which are provided with English translations in Appendix K. Teachers can use this to identify types of disability, but neither specific learning disabilities nor speech and language disorders are described (MINED, 2015). Throughout my interviews I specified that I was interested in discussing both children with recognized disabilities as well as significant learning or language problems which may have never been diagnosed but were evident to the teachers. Even if the numbers given above for the children with disabilities enrolled in schools of El Salvador were doubled, to count for undiagnosed children with mild disabilities enrolled in regular schools, there would still only be a small percent receiving education in comparison to international estimates for prevalence, and a large percentage of those would be in separate schools.

Some teachers mentioned training that had been offered for working with students who were struggling, but no teacher gave the impression that they had extensive training in this area. One teacher on the questionnaire did specify that a barrier to inclusion was that “educational authorities lack a vision for providing attention to children with learning problems” (Case 5). This indicated recognition from some teachers that significant learning problems are relevant to inclusion, even if they may not be defined as

disabilities. No special materials were observed being used with students with significant learning problems, except in the resource room of Maria, the one inclusion support teacher or DAI. The *Política de Educación Inclusiva*, Inclusive Education Policy (MINED, 2009b), clearly establishes the need to respond to students who do not “advance as expected” (p.7). It appears that since this population is not specifically identified and their problems are not defined as disabilities, they are not receiving sufficient support, especially in the majority of rural schools that do not include an inclusion support teacher. Defining these students’ problems as a disability will not guarantee the provision of adequate support, however the absence of a specific definition for their condition is an additional barrier to them receiving adequate services.

Theme 2: Teachers agreed with the philosophy of inclusion but believed that some children with disabilities would receive a better education in special schools.

Teachers interviewed for this study were committed to the idea that it was the teachers’ responsibility to teach all children who came to the school. It is noteworthy that their most positive score on the ORI survey was for the factor of “Benefits of Integration.” When asked about children with disabilities Rita said, “We try to get children into school, because they have the right to an education. We seek ways to help them and will never shut the doors” (personal communication, February 18, 2015). More than one stated that the door to all schools must be open, which may be their repetition of a slogan professed to them by their officials from the Ministry of Education, though I never came across this phrase in any Ministry of Education literature or heard it spoken by officials. Despite this positive attitude, they believed that the best educational placement for children with disabilities, especially those with more significant disabilities, was in special schools.

This view was grounded in their assumption that special schools contain smaller classes, teachers with more knowledge and training in disability and better resources for adapting curriculum and providing medical attention needed by children with complex needs or significant disabilities. Teachers expressed their belief that children with disabilities need more attention than can be provided in a regular classroom in a rural school. However, they also recognized the difficulty in getting to a special school for many children from poor families living in remote areas. Rosa, a preschool teacher who travels over a forty minutes on two buses from her home to school, stated that inclusion was good because children from poor families could not get to the closest special school, which is in the department capital where she lives. Hector agreed and said the special school “is very far and in some cases the parents do not have the ability to get there” (personal communication, March 3, 2015).

The teachers openly expressed their support for the idea of inclusion in general discussion of the policy, their acceptance of the idea of inclusion was reflected when I observed teachers instructing children who they identified as having disabilities (e.g. deaf, epilepsy, intellectual disability, severe learning disability, visual impairments, and combined or unknown disabilities) included in regular classrooms. I did not observe children with disabilities being separated from other student nor excluded from activities. I never examined any documents providing diagnosis for any child, and in most cases I believe the teachers did not have access to any documentation of a diagnosis. In some cases the diagnosis was provided verbally to the teacher by the parents, and in a few cases with notes from a doctor. In several cases, those with less obvious disabilities but clearly significant learning problems, the problem was determined by the judgment of the

teacher, who may have been the most professional person to have interacted with the child. I never heard any negative statement regarding the inclusion of any of these students in the class, nor observed any teacher attempting to separate or exclude a child from the classroom due to a disability. Teachers did express their need for greater support and more resources in order to provide better services to these students.

Rural teachers spoke of the benefits of inclusion in interviews. Julia mentioned that inclusion gave children with different problems the opportunity to interact with their peers, and that they would not feel excluded, saying “it is important that children do not feel excluded and are part of society.” Caty proclaimed that it was good to include children with disabilities because “they are equal to the other students” and cannot be sent to a special place because they are different, which echoes the policy of the Ministry of Education. Yet teachers’ hesitance with inclusion was explained by Rosa, who stated that at first teachers are not negative about inclusion but they think “what can I do?” and are worried about the problems they may face with a child with disability in their class. She believed that when they have received training, they are not negative, but positive and open.

Teachers’ comfort with inclusion of children seemed to be affected by the severity of the disability. Research question three which examined severity, was difficult to examine due to the lack of specific definitions for disability types available to teachers and the general absence of professionals like school psychologists with instruments for diagnosis in the rural schools obstructed my ability to question them about severity of disability. Furthermore the lack of teacher familiarity with the spectrum of disabilities that exists, due to their limited training on disability and inclusion, as well as their

limited experience with children with different disabilities, complicated discussion of severity for any disability. Teachers have only their own experience to guide their judgement on severity of disability and how it could affect the inclusion of children with disabilities in their schools.

All teachers showed their concern for providing education for all children in their school's area. Julio summarized his feelings about the teachers' responsibility to accept all children who came to their local school, saying: "we take any kind of disabled children . . . remember that there are no resources to transport a child to a special education school. So we take them. It seems good to me to take the children with disabilities" (Julio, personal communication, February 20, 2015). However, Rita stated that the "more serious need to be in a special school ... which gives direct attention only for them" (personal communication, March 30, 2015).

When I asked teachers which disabilities they thought required placement in a special school, most teachers responded that a student who was deaf would best be served in a special school where the teachers had been trained to communicate with Salvadoran Sign Language. Only those with current experience as teachers of the child who is deaf gave the impression that it is not difficult to include this child who cannot hear. Her current teacher Julio noted that the fact that the student had first gone to a special school where she had learned to read had made an incredible difference, as now in fifth grade she could be guided to follow activities in the text books. Regarding children with visual impairments, two teachers said unequivocally that they would learn best in a special school, but Rosa, who had experience several years earlier with a girl with a minor visual impairment that caused her to use a telescope device in her classroom, named this as an

example of a disability that was easy to include in the regular class. Maria, who helps as an inclusion support teacher with a boy who has a visual impairment as well as a possible intellectual disorder thought that a special school would be better for him. She has discussed with his parents the idea of sending him to a special school where there are teachers better trained to meet his needs because she says he “needs more attention.” Maria mentioned a girl in the area who has Down syndrome, and noted that she has never had any training in working with children with Down syndrome and that the special school is better for this child, while Rita and Hector also named this as a disability that was best served in a special school. While several teachers interviewed thought that children with physical disabilities could be included in regular classes easily, if proper ramps and infrastructure were constructed in the schools, Rita and Rosa thought that these children would get a better education in a special school. Rosa, as quoted above, mentioned the special equipment for physiotherapy that these children needed that was not present in ordinary schools.

Julia stated her opinions regarding the inclusion of children with different types of disabilities in a regular school like her own:

For some children with physical problems, there is no problem for the regular teacher to include them, but slow learning should be in a support classroom (resource room). When they have severe problems, mental issues, because there is that kind of disability, they should be in a special school. Because it is a different attention that is needed . . . There are children for example, suffering epileptic seizures. In a regular school we cannot attend to such children, because remember it is a very special attention needed and teachers will not know what to

do . . . they should be in a special education school, because I have even heard that in a special education school they have a nurse . . . remember that there are issues of health, which require other care. (Julia, personal communication, March 26, 2015)

Hector said there had been a girl who was deaf in his school once who previously attended a special school, but here in the regular rural school her education did not progress because the teachers did not have the training needed to communicate with her in sign language, so her parents sent her to another special school. Hector said that in some cases when there are “very pronounced cases” of disability, a separate school with specialists is necessary to meet the child’s needs. Teachers were reluctant to say they could not meet the needs of children with certain disabilities or to say those children should be sent away, but were uncomfortable with the idea of meeting the needs of children with different disabilities for which they had no training and few resources to accommodate differences. They were more confident that children with severe disabilities and complex needs would get a better education in a special school.

One of the teachers, responding on the teacher questionnaire, wrote that one idea that would contribute to inclusion would be to “have special education classrooms to provide them a better education” (case 39). This would not fit the definition of inclusion but is evidence of some teachers’ perspective that separate classrooms in regular schools may provide better services for some children with disabilities. I observed Maria, the DAI, providing specialized tasks to a student with visual impairments within the regular second grade class where she provided direct assistance to him several times a week, but also saw her working with several students in her resource room and engaging them with

special materials that included using a metal screen to trace letters and provide tactile stimulation. Maria acquired these special materials and methods in one of the many workshops she had attended as part of her responsibility as the person to assist students with different problems at her school.

While teachers spoke positively about the policy of inclusion, they did not speak with confidence about how schools could provide for the needs of children with disabilities. Hector summarized his feeling about the barriers to inclusion and their impact, offering support for themes two and three:

The benefit is there is true equality, for a child with any disability has to feel they belong in society. But the downside is that there is not the adequate structure to treat them. There is not the adequate training . . . to respond to their needs. . . I think that it would be good to include them in our schools always . . . when we have the ability to attend to them, and the schools have the capacity for the children to develop. . . instead . . . what happens is that they get discouraged, frustrated and drop out of school. (Hector, personal communication, March 3, 2015)

Theme 3: Teachers are not concerned about classroom management or peer interaction in an inclusive classroom. The teachers interviewed did not express great concern for how inclusion would affect classroom management, which is also supported by their neutral scores on the ORI factor related to this topic. When asked during interviews if inclusion of children with disabilities interfered with the learning of other students, six of the nine teachers responded that inclusion did not interfere with the learning of other students. Julia, responded that in her experience it did not interfere. “If

there is good discipline it is not a problem.” However, she said that it was double the work for the teacher to adapt the curriculum for a student with a disability and work with the students of normal ability at the same time. Rosa, a preschool teacher who had taught one student with motor problems and one with poor vision, believes that inclusion does not have a great impact on classroom management and speaks of her use of peer tutors or helpers to assist children who have difficulty or need help with getting to toys. Elena commented that children with learning problems did not affect the behavior of other students, but that the teacher just had to dedicate time to give them more personalized attention and that her advantage was that “here we have few students.” Her class has only 14 students, though they represent four grade levels, kindergarten through third grade. Elena says that one of her current students, who appears to have an intellectual disability because she is significantly behind her peers in both academic and social abilities, is very quiet and does not bother other students or affect her classroom management.

Some teachers believed that the presence of children with disabilities, or those with significant learning problems, can interfere with the learning of other students, since students with difficulties need more attention and it takes more time from the teacher. Hector stated that students in his class who required more time and attention to learn academic skills affect the learning of other students, because “you have to give a little more time, especially, go much more slowly” (personal communication, April 9, 2015). Three of the teachers interviewed said that inclusion of children with disabilities or significant learning problems does interfere with the teaching and learning of other students.

Caty said that currently her school included one child who has significant learning problems and that this and some other disabilities in her experience do not affect classroom management. However, she has had experience with several children who were hyperactive, and their behavior of bothering other students and fighting with others did affect the discipline in the classroom. Maria also mentioned that her school has had three students in the past whose main challenge seemed to be behavior problems which affected their classes. She said that most children with other disabilities did not affect classroom management for the teachers.

Regarding peer interaction, teachers expressed little concern. Although teachers thought that having a child with a disability may require more of their time and therefore interfere with the learning of others, they believe that children without disabilities usually treat children with disabilities fine, not affecting class management. Maria, the inclusion support teacher, working in other teachers' classrooms, said that in her experience most students who had significant learning problems or obvious disabilities did not affect the classroom discipline and gave the example of other students going out of their way to look out for and help a current student who has significant visual and intellectual difficulties in the second grade class.

Teachers reported that in some cases, students with disabilities may have remained isolated socially in their classes but in most cases they have not had negative relations with other students. Maria highlighted the way inclusion has given her the opportunity to teach students the need for respect for their classmates and that now students without disabilities look out for and protect a boy with visual and intellectual issues in a second grade class. Elena noted that the girl with a disability in her class who

has trouble expressing herself with more than short phrases sometime plays with the other students and sometimes isolates herself. Elena has not had problems with this girl bothering other students or them bothering her. She described the value of inclusion in the girl developing the ability to socialize with other children. The girl had overcome her initial fear of coming to school and separating from her mother. When I observed this class, the girl was given the same work as younger students, though she did not appear to complete any work in class. Elena showed me how she wrote words to copy in the girl's notebook and discussed how the girl's mother may copy the words for her at home. The girls was not observed to write any words in class, only to draw on paper.

Hector has a second grade student in his current class who has significant learning problems but who plays and talks with other students completely normally and shows no social impediments. When I observed Hector's class I noticed that he gave much easier math problems on the board to this student but I saw no evidence of problems with social interaction or communication. Hector commented that if you talked to the boy you would not notice any problems, but academic work was very difficult for him.

Aside from the example of hyperactive students, who Caty mentioned often fought with other students, the teachers did not express the idea that children without disabilities were bothered by students with disabilities. Julia said that this depends on the attitude of the teacher, "if they try to make him feel that they can integrate with others and see that there is much to learn, then the children will accept them" (personal communication, March 26, 2015).

Only one instance of problems was mentioned by a teacher. Caty described an issue with students bothering and taunting an older male student with hearing problems in the past at her school. The boy was 16 years old and could not speak but did express that he was being bothered by the other students. Caty said that the teachers had to teach the value of respect to students so that they would not look down on a student who was different. No other teacher recounted any other similar experiences in the schools where I conducted my study, and I never observed any conflict between students with disabilities and other students. While I had confidence the teachers I interviewed were speaking honestly, they may not have wanted to implicate themselves by openly describing every difficulty their schools had experienced with students. I never observed any student with disabilities being excluded or ignored in a classroom. In one case, I observed a teacher sitting alone for an extended period of time with a child who has learning problems while other students worked in their books and I realized that my presence as an observer investigating inclusion may have caused the teacher to provide more help to this student than she would regularly.

One positive aspect of inclusion, which multiple teachers mentioned in interviews, was the use of peer tutors to help students who were struggling academically or who needed physical assistance in the classroom. Julia described that students who finished their work first often helped guide their classmates who were struggling with the same tasks. Rosa expressed that with little children it is easy to show them how to work together despite differences, and that her students had helped a child with motor problems to get to toys in the classroom. Julio explained that a girl in his fifth grade class is deaf, but had learned to read when she was younger and attended a special school. Now she is able to

work in the regular classroom with guidance from a classmate who can show her what the teacher said to work on. Since no one else in the school knows sign language, “what we do is have her work with another classmate” guiding her. Julio went on to say that his student who is deaf was completely accepted by the other students and played or socialized with them, which was clearly observed in my visit to the school.

Theme 4: Teachers need training/ “They have not trained us, we just received the children and nothing more” (questionnaire case 1). The desire for training on inclusion was clearly evident from the questionnaire responses as well as the interviews. Teachers discussed the fact that the only talks or workshops they had experienced were related to the policy of inclusion, but that they had never been given strategies or tools for working with children with disabilities and meeting their special needs inside their classrooms. The majority of teachers surveyed and interviewed stated that they had received zero hours of training in disability or inclusion. Even the inclusion support teacher, with many more hours of inclusion training than the other teachers, expressed her need for more training in order to accommodate children with specific disabilities living in her school’s area.

On the teacher questionnaire, 43 teachers were asked how many hours of training they had received related to special education or inclusion of children with disabilities. I calculated an average of 36.9 hours of training for the seven teachers who had training related to inclusion or disability. This average is skewed by the fact that Maria, one of the teachers from these rural schools, is a DAI, or inclusion support teacher, with the specific job to support inclusion and previously ran a resource room for students with difficulties. Maria has attended many workshops in the capital as part of these special Ministry of

Education programs and estimated in an interview that she had received over 90 hours of training in the years she has focused on students with disabilities.

More than half of the teachers responded on the teacher questionnaire that a lack of teacher training was a barrier to inclusion. Another eight teachers expressed their opinions that teacher training contributes to inclusion, but did not identify lack of training as a barrier. However, only one of the teachers who said that teacher training “contributes” to inclusion was among the eight teachers who indicated in another question on the survey that they had received training related to inclusion. Therefore it can be inferred that these teachers saw the importance of training teachers to provide good inclusive services to children with disabilities in regular schools but were not indicating that they themselves had been properly trained to provide those services in their schools. One teacher wrote that the “national education system, especially in rural areas, is not prepared for inclusion” (case 39). This may be interpreted as another vote for the need for training, as “*preparada*” is often used as a synonym for “trained” in Spanish, or the teacher could very well have been describing a wider meaning of “preparation” which may include training as well as many other aspects of organization and infrastructure that may be required for inclusion but were not named by this teacher. In interviews, teachers also spoke most frequently about their lack of training as a barrier to inclusion.

In the teacher interviews, the majority of the teachers expressed serious doubts in their abilities to teach children with disabilities. Most emphasized the fact that they had never had training in how to work students with disabilities, and did not even have a basic understanding of definitions or characteristics of disabilities that may affect a child.

Elena said “we do not have the ability because we have not been prepared for this situation” (personal communication, February 12, 2015). While the teachers seemed to be in agreement that it was their responsibility to teach any child who came to their school, they did not feel capable of meeting the needs of children across the spectrum of disability, of which they had little knowledge. Teachers did not demonstrate any lack of confidence when observed in their classrooms, and the ability of most to instruct and attend to students from different levels in a mixed grade classes working on different tasks at the same time was admirable.

Some of the teachers were positive about their ability to teach children and meet the challenges that arise from differences, but still implied the need for more learning and or support. Donna said, “The University prepares one to address these types of problems . . . if the teacher wants to complete their work as they should, they have to research in books and the internet. . .” (personal communication, April 8, 2015). Julia commented, “This also depends on the motivation of the teacher, because if the teacher is motivated and really wants to help these children, they will find a way to train themselves, a better way to try to help” (personal communication, February 19, 2015). Yet, one teacher wrote on the questionnaire, “In a regular school where other students attend, there is not the teacher training or the necessary resources” (case 23). Hector commented, “the system is not adequate, nor are we trained to respond to the needs of the children who have a disability” (Hector, personal communication, March 3, 2015).

Multiple teachers interviewed discussed the fact that they had heard many talks about the policy of inclusion, and the idea that each school should meet the diverse needs of their students, but they had not received training in strategies or tools for working with

children with disabilities. Teachers also indicated they had never received training in the characteristics and differences of disabilities. One director, Julia, responded that a summary of the definitions and characteristics of different disabilities would be the best initial training for inclusion with teachers. When asked if he had any training in inclusion or disability Julio responded, “only in the theory of inclusion . . . we cannot leave a child out of school. We have to receive the child with open arms . . . whatever the disability is . . . but in practical specific abilities, nothing” (Julio, personal communication, February 20, 2015). The director, Julia responded to the question of whether she was professionally prepared to teach children with disabilities, “Well I would say yes, because I have the academic preparation to give attention to children, and when I encounter a different situation I research, I love to read and investigate, and find a solution to things” (Julia, personal communication, March 26, 2015).

However, another director Caty said, “I mean we are not fully prepared because they have not given us training, we have not received orientations. When we studied to be teachers, we did not study to serve children with these disabilities” (personal communication, April 8, 2015).

Theme 5: A lack of resources, including materials and personnel, is a major barrier to inclusion/ “The teacher needs . . . to have an adequate classroom with different resources” (questionnaire case 28). On the teacher questionnaire, 15 teachers responded that a lack of resources was a barrier to inclusion. Nine more teachers listed resources as important factors which could contribute to inclusion, but did not specify whether they had sufficient resources available due to the wording of the question.

Didactic materials, necessary tools and adequate spaces were named in some of those responses as barriers and facilitators.

Lack of infrastructure was identified as a barrier for inclusion by 10 teachers on the questionnaire, with several mentioning the need for ramps to make schools accessible. The government itself was viewed as a barrier to inclusion or was identified as needing to give more attention to inclusion by seven teachers on the questionnaire. While not specific, these responses imply that teachers are not getting what they feel is needed from the Ministry of Education.

Interviews revealed the same belief that more resources were needed to provide good inclusive services. Caty said that the Ministry needed to “give appropriate material for children, for different disabilities” (personal communication, April 8, 2015). Teachers’ unfamiliarity with the special needs of children with disabilities, probably due to a lack of training, prohibited them from being specific about the resources needed in most cases. Without knowing what special materials might be needed for teaching children with disabilities the teachers mentioned their current needs for basic materials like paper, markers and more books or a photocopier. When asked what the Ministry could do to help schools teach children with disabilities, Julia responded simply that they needed to give the “necessary resources.” A clear example of needed resources was given by the inclusion support teacher, Maria, who had been provided with digital video files about Salvadoran Sign Language at a workshop but had no computer in the school to use to instruct students with this material. I did not observe any teachers other than Maria providing any special materials or assignments to struggling students in class. I only noticed teachers giving easier problems in the same assignment to some students a

few times. Several teachers also mentioned the lack of ramps to enter classrooms or to access the latrines for students who would need to use wheel chairs or other assistive devices.

The teachers' inability to describe specific resources that they would need for inclusion cannot minimize the value that so many of the teachers placed on this problem when discussing the barriers to inclusion. They were certain that they would need more resources, from didactic materials, to improvements in infrastructure to more specialized personnel to adequately meet the needs of children with disabilities in their schools.

Elena said she did not know what materials would be used in a special school but that she did not have them. She also noted the advantage of larger schools which had an inclusion support teacher, or DAI, with training to work with students with intellectual problems, indicating a personnel resource that was obviously absent in her small school of only two teachers. Rosa summarized the following barriers during an interview, "there is no ramp to come up here, if you need a wheel chair to go down . . . training has not been constant really, we do not have support material for these children." When asked what could be done to provide better services for a child with learning difficulties, Rosa continued, "identify the child's problem, then give the necessary resources for the child to develop despite their problems, and the assistance of a psychologist, or medical support" (personal communication, March 25, 2015). This statement identifies the lack of professional diagnosis and assistance provided to teacher regarding children with disabilities. Maria, the inclusion support teacher, complained how little professional help she had received for the various children she was helping. She expressed her hope that a school psychologist, who was now scheduled to visit her school once a month on contract

from an NGO, would finally be able to provide evaluations for multiple students she was concerned for. I concluded that the relative absence of professional psychological services in rural schools of El Salvador was the reason that more teachers had never mentioned this need.

Transportation was one resource mentioned by multiple teachers on the teacher questionnaire, as a barrier to inclusion. These responses were not specific, but could refer to the difficulty in getting to the local school from home on uneven rocky and inclined paths if a child had a physical disability. Another three responses indicated that the special school was far from the rural community. Several responses described a lack of ability for parents to take their children to school and the problem of public transportation not being adequate for people with disabilities. Since many rural schools are in communities where there is no public transportation, it is unclear if these responses are referring to the overall lack of public transportation in rural areas or instead to the lack of accessibility of buses that would transport children to an urban area where the closest special school is. While special schools do not fit the definition of inclusion, it is possible that in these short responses, teachers were thinking that getting children with disabilities into special schools qualified as including them in the educational system, when they may not be currently included anywhere.

Rosa commented on her belief that certain physical needs could not be adequately provided for in a regular school:

I think, in general schools we can attend to the problems of low vision children, but not children with locomotor problems, because they need special resources.

There are balls where they can do exercises . . . they need a doctor who is a physiotherapist to make exercises, they need other tools to learn to manipulate and gain control of their hands and feet. Therefore, those kinds of children, we would not have them in mainstream schools. (Rosa, personal communication, February 13, 2015).

During my observation, Rosa brought in her own computer to show the students certain cartoons she has found to teach about the importance of vaccinations. This activity may be evidence of Rosa's extraordinary dedication to bring in her own computer, an expensive and rare personal resource in rural El Salvador, and find entertaining resources to teach the children in her class. I never observed any other teacher using a computer in class. Hector was the only who told me his school possessed a computer, but it was being kept at the director's house due to the school roof repairs that had caused them to have classes outside one week that I visited

Theme 6: Teachers' attitudes were consistent regardless of family or professional experience and inclusion training levels. Neither the statistical analysis of the ORI survey nor the qualitative interviews indicated a significant difference in the attitudes of teachers toward inclusion based on their experience of disability with friends or family or their professional experience teaching children with disabilities. This may be a result of a very small sample for statistical analysis as well as the small number of teachers surveyed and interviewed who had family or friends with disabilities. The fairly dominant theme of teachers' belief in their need for more training and resources may result in similar responses from both teachers with and without previous personal or professional experience with disability regarding the feasibility of providing good

inclusion. Neither teachers with family or professional experience with disability expressed considerable differences in their discussion of inclusion, as they were in agreement with those who did not have these experiences that more training and resources are necessary for teachers to successfully meet the need of children with disabilities in rural schools.

Six of the teachers interviewed had no experience with family or friends with a disability. Julio noted that he had a cousin who was deaf, but none of his family members had learned sign language to communicate with him. Rosa and Hector both mentioned friends with disabilities. Rosa discussed a former student and friend who struck his head on a rock and walks with crutches after years of therapy, but is studying in a university now. She was clearly proud of the success he had despite the struggles of his disability. Hector recounted that he had friends who suffered injuries in the war, and how he felt fortunate that he had not been injured but had remained strong and could help others. Since experience with family and friends was not common among the teachers interviewed it was not a prominent part of the interviews. All but two teachers interviewed said they had experience teaching children with disabilities as was discussed earlier, but there was not an obvious difference in the attitudes or beliefs of those two directors, Julia and Rita, from the other teachers. Like the other teachers, they expressed similar ideas regarding rights of all children to go to school and the benefits of inclusion as well as their lack of confidence meeting the needs of children with disabilities due to their lack of training. The one teacher interviewed with extensive training, Maria, was observed using many materials and strategies she had acquired through training. However, her discussion of inclusion did not contradict the ideas of the other teachers.

She too expressed a need for more training and resources and stated that some students would receive a better education in a special school.

Theme 7: Teachers are concerned about the role of family support for children with disabilities/ “There are parents who are not aware of the problems their child has” (Maria). Multiple responses on the teacher questionnaire mentioned the support of family as something that would contribute to inclusion, and 16 wrote that a lack of interest or support from family was a barrier to providing good educational services. Three of those specifically pointed to the failure of parents to accept their child’s disability, one writing, “Many Parents do not accept that their child needs special attention” (case 23). Speaking about families of children with problems during an interview, Rosa claimed, “if they do not accept it you can’t do anything” (personal communication, February 13, 2015). One teacher wrote on the questionnaire that “Lack of interest and responsibility of parents in the education of their children” (case 39), was a barrier to inclusion.

During interviews teachers mentioned lack of understanding or acceptance of disability by parents as a barrier to inclusion. Rita spoke of multiple experiences she had as director where parents were not providing the necessary care or guidance for their children who were struggling in school. She recounted one example of a current boy in her school who was 14 years old but was still in first grade. She had tried to get the parents to take the child to a doctor or psychologist to evaluate him, but they would not accept that their son had a problem and would not seek consultation. Another director, Caty mentioned that children not going to school was sometimes the result of parents not wanting to send them, especially if they had medical needs that parents thought would

not be cared for in the school. This could reflect on the ignorance of parents of children with minor problems or it may be evidence of the limited resources available in rural schools and the reality of the challenges inherent with some significant disabilities.

At the same time, parents are often actively involved in some schools. I observed mothers present in schools on multiple visits, as snack is usually brought to school by mothers who receive rations of food from the MINED and prepare it to return to school. Julia who teaches preschool was proud to talk of how she has mothers who help her with children in the classroom. The idea of family support was clearly seen as important by teachers. Praising the parents of a girl in her school with significant learning problems, Caty said, “the girl has the support of her family, because from the moment they send her to school that's part of the support they give, because they know the problem she has” (personal communication, April 8, 2015).

The importance of families in supporting the education of children with and without disabilities was clearly evident in the comments given by teachers. On the questionnaire, one teacher stated the barrier of “the family which doesn’t have the resources to attend to the child's needs and sometimes doesn’t know that the boy or girl needs a more specialized attention” (case 36). The situation of the rural families themselves is a complex one that was not investigated in this study and calls for more research.

Summary

In general, these findings suggested that some children with disabilities are not in school and those enrolled with mild disabilities are not always getting needed services. While teachers agreed with the philosophy of inclusion, they believed that some children with disabilities would

receive a better education in special schools. They are not concerned about classroom management with inclusion, but teachers do not feel that they have been trained well to meet the needs of children with disabilities. They are certain that their schools do not have the necessary resources to provide quality inclusive education and many teachers are concerned about family support for children with disabilities. The similarity of teacher attitudes, despite differences in experience or training, are evident across the various sources of data.

Chapter V

Discussion

In this study I investigated the attitudes of teachers in rural schools of one municipality in El Salvador toward the inclusion of children with disabilities in their regular classrooms. I used a mixed methods approach to collect surveys from teachers at every rural school in the municipality and followed with open-ended interviews with six teachers and three directors from eight of the twelve schools. These data were supported by observing teachers in their classrooms as well as interviews with officials from the Ministry of Education and local nongovernment organizations who work in the education sector to verify and provide contextual understanding of the teacher responses. In this chapter I discuss a summary of the findings, followed by the limitations of this study, the recommendations for practice, directions for future research and conclusions.

Summary of Findings

This study revealed seven themes which cut across the research questions. Some children with disabilities are not in school and those enrolled with mild disabilities are not always getting needed services. Teachers agreed with the philosophy of inclusion, but believed that some children with disabilities would receive a better education in special schools. They were not concerned about classroom management with inclusion. Teachers desired more training on disability and inclusion. They believed that a lack of resources, including materials and personnel, was a major barrier to inclusion. Teachers' attitudes were consistent regardless of family and professional experience with disability or amount of inclusion training. Teachers are concerned about family support for children with disabilities. The findings are discussed in relation to the theoretical

framework of this study, the Bioecological model of Bronfenbrenner (1979, 2005) as well as the relevant literature available regarding inclusive education around the world.

Theme 1: Some children with disabilities are not in school and those enrolled with mild disabilities are not always getting needed services. All participants interviewed agreed that some children with disabilities are not enrolled in school in El Salvador, which is not surprising since, “recent research shows that disability is a stronger correlate of non-enrollment than either gender or class” (USAID, 2011, p. 17). While official numbers for children not enrolled do not exist, the fact that average years of school completion for students in rural areas is half that of students in urban areas (MINED, 2009b) is in itself reason for concern over the educational opportunities for children with disabilities in rural El Salvador. The barriers to children with disabilities attending school in rural El Salvador are great (Beckman, 2014) however, most teachers interviewed indicated they knew of no students out of school in the community where they worked. It was not possible to verify the credibility of their claim without interviewing community members, for which this study did not have approval.

In the schools visited in this study it appears that less obvious or mild disabilities are often overlooked. The Policy of Inclusive Education, *Política de Educación Inclusiva* (MINED, 2010) seeks to address the diverse needs of all students in El Salvador. While this document clearly establishes the intent to include all students and to respond to the special needs of students who do not access schools, do not advance as expected, and who repeat grades or abandon school (p. 8), children with learning disabilities or other mild disabilities are not included in official definitions of disability or special educational needs. As a result, children with less severe or mild disabilities are not likely to receive

adequate assistance. The question of whether mild disabilities are defined as disabilities or not can be attributed to the exosystem in Bronfenbrenner's model, the policies of the Ministry of Education or more generally to the larger macrosystem of Salvadoran society which has not had sufficient resources to explore and meet the needs of persons with mild disabilities as a developing country recovering from decades of civil war.

A report by the OECD, *Students with disabilities, learning difficulties and disadvantages: statistics and indicators of OAS countries* compared data from 21 countries across the Americas. This report indicated that the term "special educational needs" can cause confusion as there are different definitions in different countries. In the report, the group of students with "disabilities" was distinguished from those with "difficulties." The second category, those with learning difficulties, includes "students with behavioral or emotional disorders, or specific difficulties in learning" (OECD, 2007b, p. 12). The OECD report did not include El Salvador but it revealed higher percentages of children receiving additional resources for learning difficulties than those for medical disabilities in statistics from Mexico, Chile, Uruguay as well as for the United States and in the median of OECD countries. Data from the United States indicate that over half of the children receiving special education services have been diagnosed with specific learning disabilities or speech and language disorders (National Center for Education Statistics, 2015b). Although these two conditions are not defined as disabilities by teachers in El Salvador and are not listed as disabilities at the national level (MINED, 2015), the academic success of students with these problems is clearly important to the policy of inclusion in El Salvador.

One explanation for the relatively low percentage of students enrolled in El Salvador's schools with diagnosed disabilities, discussed in chapter four, may be that students with significant disabilities are not being enrolled in the first place. Another may be the failure to diagnose mild disabilities. While students with learning difficulties or mild disabilities are likely to be enrolled in regular schools, only 80.8% of all students who enter the educational system in El Salvador complete the sixth grade (UNESCO, 2015, p. 363) and the difference in school completion for urban and rural students discussed above implies the numbers would be even lower for children in the communities investigated. If the children who have specific learning difficulties or speech and language problems are not receiving adequate support for their difficulties, it seems that they are likely to be in that large group of students who are dropping out before completing primary school.

The EFA Global Monitoring Report noted that teachers need skills in classroom-based assessment to identify struggling learners (UNESCO, 2014). Interviews and observations did not reveal any mechanism to assess and identify students with learning disabilities, nor particular supports to assure their success in these rural schools. The absence of definitions for mild but usually prevalent disabilities including specific learning disabilities and speech and language disorders, further inhibits providing quality services to this presumably large group of children who may be in regular schools but receive no special services or professional help which could help to improve their academic results.

Theme 2: Teachers agreed with the philosophy of inclusion but believed that some children with disabilities would be receive a better education in special

schools. While overall attitudes toward inclusion were found to be close to neutral in the studies reviewed, previous reviews of the literature by Scruggs and Mastropieri (1996) and by Avramidis and Norwich (2002) indicated that teachers were more positive toward items related to the philosophy or concept of inclusion, just as this study found. Studies from the last decade also found teachers thought the advantages of inclusion outweighed the disadvantages (Sadler, 2005) and were more positive toward the philosophy of inclusion than toward the difficulties they expected in the functioning of an inclusive classroom (Avramidis & Kalyva, 2007), again a finding that was similar to the ideas teachers expressed in the interviews and survey from this study.

Similarly, in previous work conducted in the capital of El Salvador, Figueroa et al. (2005) found teachers to be close to neutral on their overall survey but more positive on questions addressing philosophy of inclusion than those related to conduct, administration and their ability to teach children with special needs, aligning with this study of teachers from rural schools in the same country. Further analysis of the surveys sub-factors indicated that these teachers recognized the potential benefits of inclusion but were concerned about their ability to teach children with disabilities. When asked to compare inclusion and separate education, teachers generally felt that children with special needs were likely to get a better education in a special school, perhaps in part because they felt that they lacked sufficient training. This is consistent with findings by Blackman et al. (2012) who found similar results for teachers, positive on the factor “Benefits of Integration”, but negative on the factors “Ability to Teach Students with Disabilities” and “Separate versus Integrated General Education.”

These attitudes were supported by the interviews with teachers as they spoke positively regarding the benefits of inclusion for students with disabilities. They clearly stated the belief that it was their responsibility to provide an education to all children in the area of their school. However, teachers were clear about the barriers they perceived to inclusion which are addressed in the discussion of themes three and four. They did not indicate great confidence in their ability to meet the needs of children with disabilities in their classrooms on the survey or in interviews, and often responded that children with specific disabilities would receive a better education in special schools.

The understanding that teachers acknowledged the rights of students with disabilities may be linked to the larger sense of human rights which has been an important part of Salvadoran culture since the end of the civil war in 1992. One professor at a university in San Salvador informed me that in El Salvador people talk about education as a “human right.” Many teachers in this study noted that children with disabilities had the “right” to go to school and could not be turned away suggesting that this cultural value at the level of Bronfenbrenner’s macrosystem might have been at play in the way that they viewed inclusion. In a mixed methods study in Columbia Diaz Haydar and Franco Media (2010) indicated that teachers accept inclusion as a policy they must work toward and that will help students in life, saying that “Teachers recognize the natural and constitutional right of children with special educational needs to attend regular schools without discrimination” (p. 21). In future studies, it would be interesting to include a direct examination of the training curriculum to determine whether inclusion is describe within a rights based context. The Ministry of Education’s ratification of the

CRPD and its written policy of inclusion suggests that at the level of the exosystem, MINED sets an expectation of the teachers to accept all students.

The somewhat contradictory idea that teachers believe there are benefits to inclusion but that some children with disabilities would receive a better education in special schools aligns with previous work in Ethiopia where Abera (2014) found that teachers in a regular school agreed that their school should be open, since all children with disabilities should receive an education, but many felt that “special schools with specially trained teachers had more resources to effectively teach children with disabilities than did theirs” (p. 164). Several current studies indicate that support for inclusion coupled with the belief that students will receive a better education in a separate school, while seeming contradictory, may be shared by some teachers. In South Korea Hwang and Evans (2011) found that over 40% of teachers thought that inclusion was a good idea and 24% gave a neutral response, yet the vast majority (75.85%) “felt that students with disabilities would receive a better education in a special education classroom” (p.140). In China, Deng (2008) revealed that the majority of teachers surveyed agreed with items regarding the positive effect of inclusion, yet most also agreed with items counted under the benefits of separate education. Diaz Haydar and Franco Media (2010) indicated that although teachers in Colombia recognize inclusion as a reality, some believe there should be special classes with special teachers to provide better attention to children with disabilities.

In the United States over 14% of all children with disabilities spend less than 40% of their time in regular classes and 19.8% spend only 40-79% in regular classes (National Center for Education Statistics, 2015a). Although high income countries have more

resources to ensure better inclusion of students with disabilities, the system in the United States still employs multiple methods to provide special attention outside of the regular classes. Countries across Europe also still use special classes and special schools to provide education to some children with disabilities (WHO & World Bank, 2011). The World Report on Disability acknowledged that inclusion can be difficult and that “there will be poor outcomes for children with disabilities in a general class if the classroom and teacher cannot provide the support necessary for their learning, development, and participation” (WHO & World Bank., 2011, p 212). Therefore services outside of an inclusive classroom appear to be an important part of providing education to children with disabilities in some places.

The idea that teachers may support the need for inclusion but at the same time believe that a child with a disability would receive the best education in a special school is an apparent contradiction that would benefit from more attention in the literature. Indeed in many cases attitudes toward inclusion has been equated with attitude toward disability and in addressing the needs of individuals with disabilities, it is common for international agreements to emphasize the issue of inclusion rather than the need to provide services for individuals with disabilities (UNESCO, 2000; United Nations, 2015).

The International Working Group on Disability and Development (IWGDD), organized and funded by various government and international organizations, chose not to advocate for “inclusive education” as part of their campaign to make disability part of the EFA agenda but rather to “urge that education strategies recognize and incorporate the needs and views of people with disabilities” (Mindes, 2014, p. 64). The coordinator

of the IWGDD noted that this decision to not use the phrase “inclusive education” was needed to enlist support from global disabled people’s organization like the World Federation for the Deaf and the World Blind Union, whose view was that “different educational approaches could coexist” (p.65). If organizations of disabled people could promote separate education for some children with disabilities, presenting teachers with a dichotomous choice of total support for full inclusion or ignoring the rights of children with disabilities is unfair. In this study I observed that teachers supported the idea of inclusion and recognized the right of all children receive and education in their local school but believed that children with some disabilities would receive a better education in a special school, if they could attend. This belief may result from these teachers’ lack of training on how to meet the needs of children with disabilities in their own classrooms.

Theme 3: Teachers are not concerned about classroom management or peer interaction in an inclusive classroom. The issue of classroom management when including children with disabilities did not seem to be a concern to teachers in this study. The teachers’ score on the ORI factor “Integrated Classroom Management,” was neutral and most teachers interviewed did not indicate that inclusion disrupts the classroom. This appears to be different from the findings of Figueroa et al. (2005), in which teachers in San Salvador scored most negatively on the section of their scale which related to conduct, but their lack of qualitative data provides little explanation of what problems those teachers expect with inclusion.

One teacher interviewed did recount experience of children with hyperactivity fighting with other students and several mentioned that the extra time students with disabilities needed could interfere with the learning of other students. These findings are

in line with Scruggs and Mastropieri (1996) whose review of the literature found that while the majority of teachers agreed with the concept of inclusion, “A substantial minority believed that students with disabilities would be disruptive to their classes or demand too much attention” (p. 71). While Diaz Haydar and Franco Media (2010) found that some teacher feared a loss of control in the inclusive classroom, the teachers in this study appeared less concerned about their ability to maintain control and more troubled by the extra time students with disabilities may need and how that could slow down the learning of others.

While several teachers interviewed mentioned the benefit typical students helping those with disabilities in an inclusive class some teachers indicated that students with disabilities are sometimes not socially integrated with peers in their classes, which is not uncommon for students with disabilities included in regular classes, (de Boer et al., 2011; Odom et al., 2004). Overall, teachers did not have problems with peer interactions but felt unprepared to meet the needs of all children in an inclusive classroom.

Theme 4: Teachers need training/ “They have not trained us, we just received the children and nothing more” (questionnaire case 1). The need for more training was the most dominant theme I found in both the interviews and the teacher questionnaire. Although results from the survey conducted in this study did not indicate that training improved teachers’ attitudes toward inclusion, they expressed a need for more training both in their written responses on the teacher questionnaire as well as in the interviews. Although El Salvador’s law for equal opportunities for person with disabilities (Asamblea Legislativa, Republica de El Salvador, 2000) mandates that the government shall “promote the training of human resources to provide training to persons

with special educational needs” (p.4), a decade later, in the *Política de Educación Inclusiva* (MINED, 2010), the Ministry of Education still noted the lack of professional training for teachers regarding diverse students as a factor that excludes children from schools. As evidence of that, the majority of teachers responded that they had not had any training related to inclusion or disability, and all teachers interviewed declared a need for more. Teachers do not feel that this aspect of the Ministry of Education’s policy has been achieved.

While the limited training that some teachers had received did not change attitudes in this study, the teachers identified a need for more extensive training on practical strategies for teaching children with disabilities to improve their confidence and abilities to provide quality inclusive education. This reflects an effect of the exosystem which is government policy and the funding provided for the realization of that policy, on the attitudes of teachers.

These findings are consistent with other studies conducted around the world as previous literature reviews (Bowman, 1986; Scruggs and Mastropieri, 1996; Avramidis and Norwich, 2002; de Boer et al., 2011) have highlighted teachers’ need for more training on inclusion. The need was also emphasized in multiple of the studies described previously in Chapter I (Álvarez et al., 2005; Batsiou et al., 2008; Diaz Haydar & Franco Media, 2010; Deng, 2008; Figueroa et al., 2005; Hammond & Ingalls, 2003; Hwang & Evans, 2011; Sadler, 2005). UNESCO even stated that one of the 10 most important policy reforms to achieve equitable learning for all was to “Train teachers to meet the needs of all children” (UNESCO, 2014, p. 301).

Theme 5: A lack of resources, including materials and personnel, is a major barrier to inclusion/ “The teacher needs . . . to have an adequate classroom with different resources” (questionnaire case 28). A lack of resources, both material and personnel, was revealed by teachers on both the teacher questionnaire and interviews. Teachers indicated the need for improved infrastructure, special didactic materials designed for learning problems and disabilities, and direct support from personnel trained in disability to improve their ability to provide inclusive education. While teachers interviewed failed to name specific material things that they needed, they implied that their lack of training for inclusion left them unfamiliar with what would be useful.

These findings are again consistent with those of other researchers in the United States and around the world revealed in previous literature reviews (Bowman, 198; Scruggs & Mastropieri, 1996; Avramidis & Norwich; 2002) as well as in recent studies (Álvarez et al., 2005; Chiner & Cardona, 2012; Hwang & Evans, 2011; Sadler, 2005). In Colombia, Diaz Haydar and Franco Media (2010) also found that teachers noted their need for resources both human and material to provide effective inclusive education. In Ethiopia, Abera (2014) concluded that resources, including teaching materials and accommodating environments, were seen by teachers as necessary for inclusive education. Although Figueroa et al. (2005) did not investigate teachers’ need for resources in their study of teachers in San Salvador, they concluded that the lack of both human and material resources could be possible variables which caused teachers in their study to not have a more positive attitude toward inclusion. The issue of resources may be defined as a problem in the exosystem, as the Ministry of Education has failed to provide sufficient funds to realize the goals and policies it has set. Lack of resources is

also a wider issue which is often part of challenges in a low-income country. Financial limitations are common across the macrosystem of El Salvador's society, where many microsystems of families and schools struggle to meet for their basic needs.

Furthermore, the apparent lack of adequate government resources in El Salvador for identifying and diagnosing children with disabilities like that in the USA (Individuals With Disabilities Education Act, 2004) is an obvious barrier to providing appropriate services to children in any placement. UNESCO (2015) identifies a lack of understanding about disability as a barrier that limits children's access to school and states that "The earlier disability is diagnosed, the better for children and their families" (UNESCO, 2015, p.58). While definitions and methods for measuring disability vary across countries according to The World Report on Disability (WHO & World Bank, 2011), the report estimates that 15% of the world's population live with a disability. Groce et al. (2011), in a review of current literature on poverty and disability, found that 80 percent of people with disabilities reside in developing countries and 65-70% live in rural areas (p. 6). Therefore the presence of students with disabilities in rural El Salvador who are not receiving educational services may be difficult to count, but should be assumed to exist, since the numbers enrolled are so small.

The need to accurately identify and assess individuals with disabilities is a critical component of providing services to this population. Policy makers may disagree over definitions of disability, yet teachers in developing countries have few if any resources to acquire medical diagnoses or to assess individual learning and social needs and to develop adequate accommodations for those needs. While the government policy of El Salvador promotes inclusion of all children in agreement with international accords, the

availability of disability definitions, assessment materials or systems for evaluation are still lacking, especially in rural schools. In my school visits I met a school psychologist who was working on a government contract through an NGO. She visited one school in San Felipe once a month to provide workshops for teachers and parents as well as conduct evaluations of students. This frequency of visits was not adequate to complete all of the evaluations requested by the inclusion support teacher in that school of 374 students, and she had never visited any other school in the municipality of San Felipe and was not required to under this contract. The other teachers interviewed gave no indication of ever having met or talked with a school psychologist or any other specialist on disability, about the needs of their students.

Not unlike these findings in El Salvador, coordinating teams of parents and teachers who were part of an action research project on inclusion in Tanzania identified infrastructure, material resources and identification of children with disabilities as their highest priorities (Polat, 2011), all of which require additional resources. The literature review by Avamidis and Norwich (2002) concluded that variables related to the education environment, which would include the resources available, were more important in predicting attitude toward inclusion than variables related to teachers' background which supports the following theme.

Theme 6: Teachers' attitudes were consistent regardless of family or professional experience and inclusion training levels. Experience with disability has often been found to affect teacher attitudes (Avramidis & Kalyva, 2007; Bastiou et al., 2008; Kalyva et al., 2007; Ojok & Wormnaes, 2012) but did not in this study. Statistical analysis of the ORI survey data did not indicate a significant difference between teachers

with family experience with disability and those without, or between teachers with experience teaching students with disabilities and those without. While regression analysis indicated that inclusion training was a statistically significant predictor variable for the teachers' score on the factor of teachers' "Perceived Ability to Teach Students with Disabilities," other statistical tests did not yield significant differences for the total ORI score, or any of the factors, for teachers with and without training. Qualitative interviews indicated that all teachers had relatively similar perspectives, regardless of their experience or training, dominated by their belief in a need for more training and resources to provide good inclusive education.

These findings appear to minimize how individual teachers' families or schools influenced their attitude. The exosystem affecting all teachers, especially the dramatic lack of training and resources from the Ministry of Education, may result in similar attitudes for teachers despite other more minor differences in personal experience. In Figueroa et al.'s research in El Salvador (2005), they also did not find experience working with students with a disability to have a significant effect on teacher attitude. This may be attributed to the fact that teachers in El Salvador may have experience working with students with disabilities, but without the necessary resources and training, and may have found it to be a negative experience, unlike in some studies.

While multiple studies in other countries have found training to be a factor affecting teacher attitude toward inclusion (Ahmmed et al., 2012; Alghazo & Gaad, 2004; Avradmidis & Kalyva, 2007; Lifshitz et al., 2004) results from this study suggested that the amount of training teachers had was not significantly related to their attitudes about inclusion in agreement with several studies reviewed (Alquraini, 2012; Wilkins &

Nietfeld, 2004; Ahmmed et al., 2012). These findings align with those of Deng (2008), who did not find training to influence attitude, and who theorized that this lack of effect was due to the minimal amount of training the teachers had attended. The majority of teachers responding to the survey in this study had not had any training related to disability or inclusion, while a small number of teachers had attended some workshops, which may be the reason that training was not sufficient to influence their attitudes. However, this finding was supported by interview data; specifically, the one teacher interviewed who had many hours of inclusion training did not express any dramatic differences in opinion regarding inclusion than the other teachers. She agreed with other teachers on the need for more training and resources and felt that that students with some disabilities would receive a better education in a special school if they were able to attend as discussed in themes two, four and five. It is possible the lack of significant difference for teachers with and without training, on the survey, may have been related to the limited sample size, or it may indicate a lack of quality in the training that has been provided. The nature of this training could be further examined.

Theme 7: Teachers are concerned about the role of family support for children with disabilities/ “There are parents who are not aware of the problems their child has” (Maria). Teachers acknowledged the importance support from families in the educational progress of their students and some expressed concern that families of children with disabilities may not have the ability or the understanding to provide what their children needed. Teachers’ desire for more help from parents is evidence of the mesosystem in Bronfenbrenner’s model, where the two microsystems, the school and the family overlap. Both systems provide necessary support for the child and the interaction

between parents in the family and the teacher in the school is crucial to the child's success. Odom et al. (2004) noted the importance of this interaction between parents and teacher to affect the participation of the child in an inclusive setting.

Teachers identifying parents' lack of attention as a barrier to the success of students with disabilities could be interpreted as placing blame on parents for difficulties they may face with students in the classroom, but their desire for more help is understandable with the complex responsibility they have for educating children with disabilities in their regular classes with little training and few resources. Studies have found parent involvement to have a positive effect on student achievement for students in general education (Fan & Chen, 2001). However, McNeal (2014) found in the United States that schools context moderated the relationship between involvement and achievement with less resource rich schools showing less gain with increased parent involvement. The relative lack of resources in the schools in this study as well as the barriers for poor families of children with disabilities in rural communities in El Salvador (Beckman, 2014) may overwhelm the small benefit of increased parent involvement, or the lack of resources may be so extreme to make parental involvement more necessary. Either way cooperation between the two microsystems in which the students spend time every day, school and family, should be explored in future research.

Since this investigation was focused on teachers and I did not pursue permission through IRB to interview family members, I have little data regarding the complex issue of families of children with disabilities and was not able to adequately investigate the issue of family needs and supports in this study. I can only say that teachers indicated that family support was necessary and that they that families often did not have adequate

information and resources to provide for the special needs of children with disabilities in rural areas. While some teachers complained about lack of support from parents, several identified the problems of families not having sufficient information or resources to understand or provide for the specific difficulties of their child. This could be interpreted as a call for more resources in community education and medical attention directed specifically at families of children with disabilities in rural areas of El Salvador.

Limitations of this Study

While the findings of this study are consistent with other literature related to inclusion of students with disabilities, several factors may limit the value of these findings. The small sample size may have limited the power of some statistical analysis (Field, 2009). A factor analysis conducted in SPSS for this sample data revealed nine factors that do not line up with the four factors established by Antonak and Larrivee (1995) which may result from the sample not being of sufficient size. It was not possible, with the limited resources for this study, to safely sample a large enough number of teachers to conduct complex statistical analysis and at the same time represent the entire population of teachers in rural El Salvador. Since no other published research was found which examined the attitudes of teachers in rural El Salvador toward the inclusion of children with disabilities, this study was designed as an exploratory study to examine teachers from rural schools of one municipality. The needs of rural schools and their limited resources had been witnessed by the author on multiple visits to rural El Salvador with UMD study abroad trips. The examination of the data produced from this small survey, as well as the analysis of direct interviews with local teachers, provides valuable introductory information to investigate the current situation in rural schools of El

Salvador. The results of this case study provide information which could guide further research in the often overlooked field of education for children with disabilities in rural areas of developing countries, and could lead to similar but more extensive survey research with a much larger population that may result in significant statistical findings for this population.

Another potential limitation is that I used open questions during interviews but did not investigate the question of severity with specific details about different disability types and severity. The lack of an established system for making diagnoses and measuring severity as well as the teachers' limited familiarity disability types inhibited the exploration of this topic.

In this study, the emphasis was on teacher's perspectives about inclusion which relied primarily on interview and teacher responses to questions. Although observations were conducted to provide a secondary source of data, it would be useful in future research to conduct more extensive observations. Additionally, I had not received IRB approval to examine student work or to investigate student and family viewpoints. Future research that investigates these perspectives more deeply would provide a broader understanding of the implementation of inclusive practice in El Salvador. The limited resources of one researcher investigating teachers in multiple schools limited this study to focusing on teacher attitudes and did not allow for a rich investigation of many other factors which are important to the educational services children with disabilities receive. The short time allowed for observation allowed for contextual information which benefited my analysis of the teachers' attitudes but did not provide for thorough investigation of how those attitudes may affect students.

The fact that teachers knew the purpose of my study may have also affected these findings by influencing their interactions with students while I was observing, as well as affecting the way that they responded to questions resulting in a Hawthorne effect (Berg, 2001). There is some possibility that the teachers' positive discussion on the topic of inclusion was affected by their inclination to give the socially desirable response, as theorized by de Boer et al. (2011), and avoided indicating a lack of interest in the very population that my research revolved around. The Ministry of Education's promotion of the policy of inclusion could also affect their responses to any questions regarding the appropriateness of inclusion, as teachers may not want to openly express their disagreement with the Ministry's policy of inclusion. Teachers working directly with children with disabilities did not express resentment or unhappiness that they were responsible for teaching students with disabilities and were never observed to exclude or ignore these students in any way. I have a suspicion that in some cases my presence as a researcher, interested in children with disabilities, affected the occurrences observed in the classroom, as a teacher came back to the classroom to give extra attention to a student with learning problems.

Teacher perspective is only one component involved in better understanding educational services for children with disabilities. Teachers sometimes placed blame on parents for students not succeeding or for children not coming to school. The teachers' lack of familiarity with the family lives, due to their living outside the community, is an important factor not to be overlooked. When asked about children with disabilities not enrolled in school, teachers usually responded that there were none in their school's community, despite evidence that this is not uncommon in rural El Salvador. A thorough

investigation of education for children with disabilities would include more extensive exploration of communities to identify children who may not be enrolled and the teachers may not be aware of. The perspectives of the parents of those children would be valuable information in describing the current situation for children with disabilities and in exploring solutions to whatever needs are revealed.

Recommendations for Practice

Considering the findings gained through the survey of teachers from all the rural schools of San Felipe and interviews with teachers from eight of those schools, this study points to several recommendations which could improve the quality of education provided to children with disabilities in rural El Salvador. One major way in which educational services for students with disabilities might be improved in El Salvador is through more extensive and comprehensive training. All teachers interviewed in this study expressed their desire for more training related to inclusion of children with disabilities. They were often specific that they wanted and needed training on strategies and tools to use to meet the need of children with disabilities in their classrooms. They indicated that the only time inclusion had been discussed with them previously, it was regarding the policy but strategies had never been provided. This training should include guidance in adapting the curriculum and learning tasks according to the needs of children with disabilities, a necessity highlighted by Opertti and Belalcázar (2008).

Another way in which services for students with disabilities might be improved is for the school to address the needs of students with mild disabilities. The characteristics of mild disabilities such as specific learning disabilities and speech and language

disorders should be part of training for all teachers. Judging from the expected prevalence of these disorders and the teachers' admission of having taught students with significant learning problems, these children are already enrolled in regular schools but are not receiving any special services to meet their special needs. Regardless of whether these conditions are defined as disabilities or not, ideas for improving the educational services provided to these students is an important aspect of inclusion.

While higher income countries, like the United States, meet the special needs of children with disabilities by hiring teachers' assistants for regular classrooms, and this method was highlighted as important for developing and sustaining inclusive education in eight high income countries (OECD, 1999), this action would obviously be a costly one. Losert (2010) highlighted the use of assistants to increase the effectiveness of inclusive education in a study of best practices for students with disabilities, conducted for USAID, but noted that governments cite limited resources to employ more staff. If there is not the financial ability to hire more staff for schools, then another useful way in which the needs of students with disabilities might be addressed is through using systems of peer collaboration in the classroom. Ncube (2011) explained that the advantage of peer collaboration was that "students with disabilities learn academic and social skills from general education students while general education students develop the social skills of tolerance and acceptance of others who are different" (p. 80). In a meta-analysis examining the effect of peer tutoring across experiments with 938 from grades 1-12, Bowman (2013) concluded that peer tutoring is an effective intervention for students with disabilities.

Transportation to any school may be a barrier with children with mobility issues or for poor families with financial constraints, as highlighted by Beckman (2014). Government assistance for families of children with disabilities to get access to transportation may also make it possible for some children to get to their local school or to the nearest special school. Although attending a special school is not consistent with concepts of inclusion that are typically promoted in higher income countries, the overwhelming idea expressed by teachers in this study, that some students with disabilities would receive a better education in special schools, may necessitate exploring the idea of trying to meet the main obstacle to their attendance in these schools, transportation. Providing individual transportation to schools may be costly for the government, but assisting with the cost of public transportation for students may make education possible for some students who are otherwise unable to attend any schools.

Direction for Future Research

In spite of the small scale of this study, conducted by one person in one municipality, it is valuable in being the primary exploration of a population never investigated before, teachers working in rural schools in El Salvador. A large scale survey of more teachers in rural areas would avoid the weakness of the small sample size of this study and provide more valuable data which could be generalized to the entire population of rural teachers in the country. More specific investigation of teachers' anticipated needs should also be explored. Teachers often expressed a need for more resources but were not able to give specific needs, perhaps due to their lack of training in disability. A basic workshop focused on categories of disability, as they are defined in El Salvador, followed by focus groups with teachers, could be used to investigate more

thoroughly their attitudes toward the inclusion of students with specific disability types, including severity and the particular resources they would need to educate children with various types of disabilities in their schools.

Since this study focused on teacher attitudes, the important role of families was not investigated. Further research should be conducted to explore the knowledge and attitude of parents of children with disabilities. This would provide information necessary to understand the both the perspective of families with children enrolled in the school system and those who are not. The needs and challenges of the families of children with disabilities cannot be ignored in the effort to provide them with their right to a quality education.

Conclusions

The government of El Salvador has clearly accepted a policy which supports inclusion of children with disabilities in regular classes. It has not established the necessary foundations of teacher training and the availability of resources, both personnel and material, needed for schools to meet the needs of children with disabilities in the regular classrooms. If the necessary resources are not dedicated to the policy of inclusive education, it will fail to become a reality which improves the opportunities of children with disabilities, and El Salvador will remain evidence of Opertti and Belalcázar's (2008), conclusion that while many countries have declared the policy of inclusive education but have not followed through to implement it. Teachers are not opposed to the philosophy of inclusion and are including children with disabilities in their classrooms when these children are enrolled, but they believe that some children would

receive a better education in special schools. This apparent contradiction may be evidence that teachers' support for inclusion, which they see as a necessity, may be a separate topic from their belief about what would be best for the education of the student with a disability. The teachers directly express a need for more training, specifically in strategies to educate children with disabilities in their classrooms. Of course the resources and training available for education are affected by the wealth of the nation and Anastasiou and Keller (2014) found that special education coverage was significantly affected by the gross national income per capita of a nation. They predicted that increasing the GNI per capita for a nation would likely allow an increase in the education provided to students with disabilities, but admitted this was unrealistic as a strategy. Unfortunately, solutions for providing adequate quality education to all children, regardless of disability, may very well be easier to understand than to implement.

Appendix A: IRB Approval letter



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DATE: February 4, 2015

TO: Thomas Sabella
FROM: University of Maryland College Park (UMCP) IRB

PROJECT TITLE: [654080-2] Teacher's attitudes toward inclusion of children with disabilities in rural El Salvador

REFERENCE #:
SUBMISSION TYPE: Response/Follow-Up

ACTION: APPROVED
APPROVAL DATE: February 4, 2015
EXPIRATION DATE: February 3, 2016
REVIEW TYPE: Expedited Review

REVIEW CATEGORY: Expedited review category # 6 & 7

Thank you for your submission of Response/Follow-Up materials for this project. The University of Maryland College Park (UMCP) IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

Prior to submission to the IRB Office, this project received scientific review from the departmental IRB Liaison.

This submission has received Expedited Review based on the applicable federal regulations.

Please remember that informed consent is a process beginning with a description of the project and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the project via a dialogue between the researcher and research participant. Unless a consent waiver or alteration has been approved, Federal regulations require that each participant receives a copy of the consent document.

Please note that any revision to previously approved materials must be approved by this committee prior to initiation. Please use the appropriate revision forms for this procedure.

All UNANTICIPATED PROBLEMS involving risks to subjects or others (UPIRSOs) and SERIOUS and UNEXPECTED adverse events must be reported promptly to this office. Please use the appropriate reporting forms for this procedure. All FDA and sponsor reporting requirements should also be followed.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to this office.

This project has been determined to be a Minimal Risk project. Based on the risks, this project requires continuing review by this committee on an annual basis. Please use the appropriate forms for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of February 3, 2016.

Appendix B: Survey Consent form: English/Spanish

University of Maryland College Park

Page 1 of 2

Initials _____ Date _____

Project Title	Teacher's attitudes toward inclusion of children with disabilities in rural El Salvador
Purpose of the Study	This research is being conducted by Thomas Sabella, a doctoral student at University of Maryland, College Park under the supervision of Dr. Paula Beckman, pbeckman@umd.edu. I am inviting you to participate in this research project because you work in the field of education in El Salvador. The purpose of this research project is to investigate the education services of children with disabilities and teachers' attitudes toward inclusion of children with disabilities in rural El Salvador.
Procedures	The procedure involves Thomas Sabella meeting with the teachers to explain his research and inviting them to participate. Teachers will be asked to complete the 25 question Opinions Relative to Integration survey, and a ten item questionnaire that asks teachers for background information. There will also be two open, or free response questions that ask about the barriers and contributors to inclusion. Your name will not be asked for on these documents. I will give you an envelope for you to put the survey, background information, and open-ended questions into. You can then seal the envelope before you return it to Thomas Sabella. If you do not wish to complete the documents you can put the blank forms in the envelope.
Potential Risks and Discomforts	There are no known risks involved in participating in this study.
Potential Benefits	There are no direct benefits to you for your participation in this research. You will have the opportunity to share your opinions regarding inclusion. You will also be provided with a summary of the study's findings about the education services of children with disabilities and teachers' attitudes toward inclusion of children with disabilities in rural El Salvador.
Confidentiality	<p>Any potential loss of confidentiality will be minimized because the surveys are anonymous.</p> <p>All data will be maintained on the password protected computer of the investigator, Thomas Sabella.</p> <p>If I write a report or article about this research project, the only information that I will provide is a summary of the responses of the entire group of teachers who reply and possibly some quotations from the open questions, without any identifying information.</p>
Right to Withdraw and Questions	Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.

University of Maryland College Park

Page 2 of 2

Initials _____ Date _____

	<p>If you decide to stop taking part in the study, if you have questions, concerns, or complaints, or if you need to report an injury related to the research, please contact the investigator:</p> <p>Thomas V Sabella 4208 14th St NE Washington DC 20017 USA +1-202-997-5408 tomsabella7@gmail.com</p>
Participant Rights	<p>If you have questions about your rights as a research participant or wish to report a research-related injury, please contact:</p> <p>University of Maryland College Park Institutional Review Board Office 1204 Marie Mount Hall College Park, Maryland, 20742 E-mail: irb@umd.edu Telephone: 301-405-0678</p> <p>This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.</p>
Statement of Consent	<p>Your completion of the survey and questionnaire indicates that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study. You may keep this copy of this consent form.</p>

University of Maryland College Park

Page 1 of 2

Initials _____ Date _____

Título de Proyecto	Actitudes de maestros sobre inclusión de estudiantes con discapacidades en áreas rurales de El Salvador.
Propósito de Estudio	Esta investigación está siendo llevada a cabo por Thomas Sabella en la Universidad de Maryland, College Park, bajo la supervisión de la Dra. Paula Beckman, pbeckman@umd.edu. Les invitamos a participar en este proyecto de investigación porque usted trabaja en educación en El Salvador. Los servicios de educación para niños y niñas con discapacidades, y las actitudes de maestros sobre inclusiones de estudiantes con discapacidades es el propósito de este proyecto de investigación.
Procedimientos	Mediante este procedimiento, Thomas Sabella se reúne con los profesores para explicar su investigación e invitarlos a participar. Se pedirá a los maestros que completen las 25 preguntas de la encuesta Opiniones Relativas a la Integración y un cuestionario de diez artículos que pide información personal. También habrá dos preguntas de respuesta abierta, o libres, que preguntan sobre las barreras y los contribuyentes a la inclusión. No se le pedirá su nombre en estos documentos. Se le dará un sobre a cada participante para que deposite la encuesta, el cuestionario y las preguntas abiertas al completarlos. Puede sellar el sobre antes de devolvérselo a Thomas Sabella. Si no desea completar los documentos, usted puede poner los formularios en blanco en el sobre.
Posibles riesgos y Molestias	No existen riesgos conocidos de la participación en este estudio de investigación.
Posibles Beneficios	No hay beneficios directos de la participación en esta investigación. Usted tendrá la oportunidad de compartir sus opiniones con respecto a la inclusión. También se le proporcionará un resumen de las conclusiones del estudio sobre los servicios de educación de los niños y niñas con discapacidades y actitudes de los profesores hacia la inclusión de los niños y niñas con discapacidad en áreas rurales de El Salvador.
Confidencialidad	<p>Cualquier posible pérdida de confidencialidad será minimizada porque las encuestas son anónimas. Todos los datos se mantienen en el equipo protegido por contraseña del investigador, Thomas Sabella.</p> <p>Si escribo un informe o artículo sobre este proyecto de investigación, su identidad será protegida al máximo grado posible. Puede ser compartida con su información Representantes de la Universidad de Maryland, College Park o las autoridades gubernamentales en si usted o alguien más está en peligro o si estamos obligados a hacerlo por ley.</p>
Derecho de Retiro y Preguntas	Su participación en esta investigación es completamente voluntaria. Usted puede optar por no participar en absoluto. Si usted decide participar en esta investigación, es posible que usted puede parar en cualquier momento. Si usted decide no participar en este estudio o si se detiene en cualquier momento, usted no será penalizado o perderá ningún beneficio al cual usted reúne los demás requisitos.

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Initials _____ Date _____

	<p>Si decide dejar de tomar parte en el estudio, si usted tiene preguntas, inquietudes o quejas, o si necesita reportar una lesión relacionada con la investigación, por favor póngase en contacto con el investigador:</p> <p>Thomas V Sabella 4208 14th St NE Washington, DC 20017 202-9975408 tomsabella7@gmail.com</p>
Derechos de Participante	<p>Si tiene alguna pregunta sobre sus derechos como participante en una investigación o desea informar una lesión relacionada con la investigación, por favor póngase en contacto con:</p> <p>University of Maryland College Park Institutional Review Board Office 1204 Marie Mount Hall College Park, Maryland, 20742 E-mail: irb@umd.edu Telephone: 301-405-0678</p> <p>Esta investigación ha sido revisada de acuerdo con la Universidad de Maryland, College Park procedimientos IRB para la investigación en seres humanos.</p>
Declaración de consentimiento	<p>Al llenar esta encuesta y cuestionario indique que usted tiene al menos 18 años de edad; usted ha leído este formulario de consentimiento o la ha tenido lea a usted; sus preguntas han sido contestadas a su satisfacción y voluntariamente está de acuerdo en participar en este estudio de investigación. Usted recibirá una copia de este formulario de consentimiento firmado.</p>

Appendix C: Teacher interview interest form English/Spanish

I would like to be interviewed regarding inclusion of children with disabilities in my classroom as part of the research project of Thomas Sabella.

Teacher name: _____

School: _____

1. Gender (1) Female (2) Male

3. How many years teaching experience do you have? _____

4. Grade level or levels which you teach: _____

5. What degree or degrees do you have? _____

6. How many hours of training in special education or inclusion of children with disabilities have you completed? _____

8. Do you have any students with disabilities in your classroom now? _____

9. Have you had students with disabilities in your classroom in the past? _____

Maestro interés en ser entrevistado: Traducción español

Me gustaría ser entrevistado respecto a la inclusión de los niños/as con discapacidades en mi aula como parte del proyecto de investigación de Thomas Sabella.

Nombre del Maestro: _____

Escuela: _____

1. Género _____

2. ¿Cuántos años de experiencia docente tiene usted? _____

3. ¿Qué grado o grados enseña usted? _____

4. ¿Qué titulación o titulaciones posee? _____

5. ¿Cuántas horas de formación sobre la educación especial o la inclusión de niños con discapacidades ha completado usted? _____

6. ¿Usted tiene estudiantes con discapacidades en su aula ahora? _____

7. ¿Usted ha tenido estudiantes con discapacidad en su aula en el pasado?

Appendix D: Observtion Consent Form English/Spanish

University of Maryland College Park

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Initials _____ Date _____

Project Title	Teacher's attitudes toward inclusion of children with disabilities in rural El Salvador
Purpose of the Study	This research is being conducted by Thomas Sabella, a doctoral student at University of Maryland, College Park under the supervision of Dr. Paula Beckman, pbeckman@umd.edu. I am inviting you to participate in this research project because you work in the field of education in El Salvador. The purpose of this research project is to investigate the education services of children with disabilities and teachers' attitudes toward inclusion of children with disabilities in rural El Salvador.
Procedures	The procedures involve Thomas Sabella entering a classroom and observing the teachers conducting their classes. Observations will be related to the teachers' planning of the lesson, how they communicate their expectations to students, their manner of interacting with struggling students and any evidence of differentiated expectations for some students. I will not record names or identifying information regarding students during my observation. The time length of the observation will be agreed upon between the teacher and Thomas before beginning the observation.
Potential Risks and Discomforts	The only known risk for participants is the loss of confidentiality. However all effort will be made by Thomas Sabella to preserve confidentiality and no names or identifying information for participants, only pseudonyms, will be printed in any publications resultant of this research.
Potential Benefits	There are no direct benefits from participation in this research. You will be provided with a summary of the study's findings about the education services of children with disabilities and teachers' attitudes toward inclusion of children with disabilities in rural El Salvador.
Confidentiality	Any potential loss of confidentiality will be minimized by using only pseudonyms in all notes and analysis. All data will be maintained on the password protected computer of the investigator. If I write a report or article about this research project, your identity will be protected to the maximum extent possible. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law.
Right to Withdraw and Questions	Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify. If you decide to stop taking part in the study, if you have questions,

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	<p>concerns, or complaints, or if you need to report an injury related to the research, please contact the investigator:</p> <p style="text-align: center;"> <i>Thomas V Sabella</i> <i>4208 14th St NE</i> <i>Washington DC 20017 USA</i> <i>+1-202-997-5408</i> <i>tomsabella7@gmail.com</i> </p>
Participant Rights	<p>If you have questions about your rights as a research participant or wish to report a research-related injury, please contact:</p> <p style="text-align: center;"> University of Maryland College Park Institutional Review Board Office 1204 Marie Mount Hall College Park, Maryland, 20742 E-mail: irb@umd.edu Telephone: 301-405-0678 </p> <p>This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.</p>
Statement of Consent	<p>Your signature indicates that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study. You will receive a copy of this signed consent form.</p> <p>If you agree to participate, please sign your name below.</p>
Signature and Date	NAME OF PARTICIPANT [Please Print]
	SIGNATURE OF PARTICIPANT
	DATE

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Initials _____ Date _____

Título de Proyecto	Actitudes de maestros sobre inclusión de estudiantes con discapacidades en áreas rurales de El Salvador.
Propósito de Estudio	Esta investigación está siendo llevada a cabo por Thomas Sabella en la Universidad de Maryland, College Park, bajo la supervisión de la Dra. Paula Beckman, pbeckman@umd.edu. Les invitamos a participar en este proyecto de investigación porque usted trabaja en educación en El Salvador. Los servicios de educación para niños y niñas con discapacidades, y las actitudes de maestros sobre inclusiones de estudiantes con discapacidades es el propósito de este proyecto de investigación.
Procedimientos	Mediante este procedimiento, Thomas Sabella entra en las aulas y observa a los profesores dando sus clases. Las observaciones se relacionan con la planificación de los maestros para la lección, cómo comunican sus expectativas a los estudiantes, su forma de interactuar con los estudiantes que tienen dificultades y cualquier evidencia de expectativas diferenciadas para algunos estudiantes. No voy a grabar nombres o información con respecto a la identificación de los estudiantes durante mi observación. Antes de comenzar la observación, Thomas y el profesor llegaron a un acuerdo sobre la duración de la observación.
Posibles riesgos y Molestias	El único riesgo conocido para los participantes es la pérdida de confidencialidad. Sin embargo, todo esfuerzo será hecho por Thomas Sabella para preservar la confidencialidad y no usaría nombres o información de identificación para los participantes, sólo seudónimos, se imprimirá en cualquier publicación resultante de esta investigación.
Posibles Beneficios	No hay beneficios directos de la participación en esta investigación. Usted tendrá la oportunidad de compartir sus opiniones con respecto a la inclusión. También se le proporcionará un resumen de las conclusiones del estudio sobre los servicios de educación de los niños y niñas con discapacidades y actitudes de los profesores hacia la inclusión de los niños y niñas con discapacidad en áreas rurales de El Salvador.
Confidencialidad	<p>Cualquier posible pérdida de confidencialidad será minimizada mediante el uso de seudónimos para todos los participantes en todas las notas y análisis. Todos los datos se mantienen en el equipo protegido por contraseña del investigador, Thomas Sabella.</p> <p>Si escribo un informe o artículo sobre este proyecto de investigación, su identidad será protegida al máximo grado posible. Puede ser compartida con su información Representantes de la Universidad de Maryland, College Park o las autoridades gubernamentales en si usted o alguien más está en peligro o si estamos obligados a hacerlo por ley.</p>
Derecho de Retiro y Preguntas	Su participación en esta investigación es completamente voluntaria. Usted puede optar por no participar en absoluto. Si usted decide participar en esta investigación, es posible que usted puede parar en cualquier momento. Si usted decide no participar en este estudio o si se detiene en cualquier momento, usted no será penalizado o perderá ningún beneficio al cual usted reúne los demás requisitos.

University of Maryland College Park

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Initials _____ Date _____

	<p>Si decide dejar de tomar parte en el estudio, si usted tiene preguntas, inquietudes o quejas, o si necesita reportar una lesión relacionada con la investigación, por favor póngase en contacto con el investigador:</p> <p>Thomas V Sabella 4208 14th St NE Washington, DC 20017 202-9975408 tomsabella7@gmail.com</p>
Derechos de Participante	<p>Si tiene alguna pregunta sobre sus derechos como participante en una investigación o desea informar una lesión relacionada con la investigación, por favor póngase en contacto con:</p> <p>University of Maryland College Park Institutional Review Board Office 1204 Marie Mount Hall College Park, Maryland, 20742 E-mail: irb@umd.edu Telephone: 301-405-0678</p> <p>Esta investigación ha sido revisada de acuerdo con la Universidad de Maryland, College Park procedimientos IRB para la investigación en seres humanos.</p>
Declaración de consentimiento	<p>Su firma indica que usted tiene al menos 18 años de edad; usted ha leído este formulario de consentimiento o la ha tenido lea a usted; sus preguntas han sido contestadas a su satisfacción y voluntariamente está de acuerdo en participar en este estudio de investigación. Usted recibirá una copia de este formulario de consentimiento firmado.</p> <p>Si está de acuerdo en participar, por favor firme su nombre abajo.</p>
Firma y Fecha	Nombre de Participante [en letra de molde]
	Firma de participante
	Fecha

Appendix E: Non-Teacher Interview Consent Form English/Spanish

University of Maryland College Park

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Initials _____ Date _____

Project Title	Teacher's attitudes toward inclusion of children with disabilities in rural El Salvador
Purpose of the Study	This research is being conducted by Thomas Sabella, a doctoral student at University of Maryland, College Park under the supervision of Dr. Paula Beckman, pbeckman@umd.edu. I am inviting you to participate in this research project because you work in the field of education in El Salvador. The purpose of this research project is to investigate the education services of children with disabilities and teachers' attitudes toward inclusion of children with disabilities in rural El Salvador.
Procedures	The procedures involve the Thomas Sabella interviewing each participant for about 1 one hour and asking open questions regarding education services of children with disabilities and the policy of inclusion. Some examples of questions are: "Where do most children with disabilities receive their education? Can you give examples of schools with good inclusive programs?" I will use an electronic recording device to record the interview. The interview will take place at you worksite or in a place of your choosing. If necessary you will be contacted and asked for a second interview to ask you any additional questions. The second interview will last less than 1 hour.
Potential Risks and Discomforts	The only known risk for participants is the loss of confidentiality. However all effort will be made by Thomas Sabella to preserve confidentiality and no names or identifying information for participants, only pseudonyms, will be printed in any publications resultant of this research
Potential Benefits	There are no direct benefits from participation in this research. You will have the opportunity to share your opinions regarding inclusion. You will also be provided with a summary of the study's findings about the education services of children with disabilities and teachers' attitudes toward inclusion of children with disabilities in rural El Salvador.
Confidentiality	<p>Any potential loss of confidentiality will be minimized by using pseudonyms for all participants interviewed in all notes and analysis. All data and audio recordings will be maintained on the password protected computer of the investigator, Thomas Sabella.</p> <p>If I write a report or article about this research project, your identity will be protected to the maximum extent possible. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law.</p>
Right to Withdraw and Questions	Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to

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Initials _____ Date _____

	<p>participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.</p> <p>If you decide to stop taking part in the study, if you have questions, concerns, or complaints, or if you need to report an injury related to the research, please contact the investigator:</p> <p style="text-align: center;"> <i>Thomas V Sabella</i> 4208 14th St NE Washington DC 20017 USA +1-202-997-5408 tomsabella7@gmail.com </p>			
Participant Rights	<p>If you have questions about your rights as a research participant or wish to report a research-related injury, please contact:</p> <p style="text-align: center;"> University of Maryland College Park Institutional Review Board Office 1204 Marie Mount Hall College Park, Maryland, 20742 E-mail: irb@umd.edu Telephone: 301-405-0678 </p> <p>This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.</p>			
Statement of Consent	<p>Your signature indicates that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study. You will receive a copy of this signed consent form.</p> <p>If you agree to participate, please indicate if you are willing to have your interview recorded with an electronic recording device and sign your name below.</p>			
	<p><input type="checkbox"/> I agree to have my interview recorded.</p> <p><input type="checkbox"/> I do not agree to have my interview recorded.</p>			
Signature and Date	<table border="1" style="width: 100%;"> <tr> <td>NAME OF PARTICIPANT [Please Print]</td></tr> <tr> <td>SIGNATURE OF PARTICIPANT</td></tr> <tr> <td>DATE</td></tr> </table>	NAME OF PARTICIPANT [Please Print]	SIGNATURE OF PARTICIPANT	DATE
NAME OF PARTICIPANT [Please Print]				
SIGNATURE OF PARTICIPANT				
DATE				

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Initials _____ Date _____

Título de Proyecto	Actitudes de maestros sobre inclusión de estudiantes con discapacidades en áreas rurales de El Salvador.
Propósito de Estudio	Esta investigación está siendo llevada a cabo por Thomas Sabella en la Universidad de Maryland, College Park, bajo la supervisión de la Dra. Paula Beckman, pbeckman@umd.edu. Les invitamos a participar en este proyecto de investigación porque usted trabaja en educación en El Salvador. Los servicios de educación para niños y niñas con discapacidades, y las actitudes de maestros sobre inclusiones de estudiantes con discapacidades es el propósito de este proyecto de investigación.
Procedimientos	Mediante este procedimiento Thomas Sabella al entrevistar a cada participante no docente durante aproximadamente 1 hora y hace preguntas abiertas sobre los servicios de educación para los niños con discapacidad y la política de inclusión. Algunos ejemplos de preguntas son: "¿Dónde reciben su educación la mayoría de los niños con discapacidad? ¿Puede darme ejemplos de las escuelas con buenos programas inclusivos?" Voy a utilizar un grabador de audio electrónico para grabar la entrevista. La entrevista se llevará a cabo en el lugar de trabajo de usted o en un lugar de su elección. Si es necesario se comunicará con usted y le solicitará una segunda entrevista para preguntarle cualquier pregunta adicional. La segunda entrevista tendrá una duración de menos de 1 hora.
Posibles riesgos y Molestias	El único riesgo conocido para los participantes es la pérdida de confidencialidad. Sin embargo, todo esfuerzo será hecho por Thomas Sabella para preservar la confidencialidad y no usará nombres o información de identificación para los participantes, sólo seudónimos, se imprimirá en cualquier publicación resultante de esta investigación.
Posibles Beneficios	No hay beneficios directos de la participación en esta investigación. Usted tendrá la oportunidad de compartir sus opiniones con respecto a la inclusión. También se le proporcionará un resumen de las conclusiones del estudio sobre los servicios de educación de los niños y niñas con discapacidades y actitudes de los profesores hacia la inclusión de los niños y niñas con discapacidad en áreas rurales de El Salvador.
Confidencialidad	Cualquier posible pérdida de confidencialidad será minimizada mediante el uso de seudónimos para todos los participantes entrevistados en todas las notas y análisis. Todos los datos y grabaciones de audio se mantienen en el equipo protegido por contraseña del investigador, Thomas Sabella. Si escribo un informe o artículo sobre este proyecto de investigación, su identidad será protegida al máximo grado posible. Puede ser compartida con su información Representantes de la Universidad de Maryland, College Park o las autoridades gubernamentales en si usted o alguien más está en peligro o si estamos obligados a hacerlo por ley.
Derecho de Retiro y Preguntas	Su participación en esta investigación es completamente voluntaria. Usted puede optar por no participar en absoluto. Si usted decide participar en esta investigación, es posible que usted puede parar en cualquier momento. Si usted decide no participar en este estudio o si se

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Initials _____ Date _____

	<p>detiene en cualquier momento, usted no será penalizado o perderá ningún beneficio al cual usted reúne los demás requisitos.</p> <p>Si decide dejar de tomar parte en el estudio, si usted tiene preguntas, inquietudes o quejas, o si necesita reportar una lesión relacionada con la investigación, por favor póngase en contacto con el investigador:</p> <p align="center"> Thomas V Sabella 4208 14th St NE Washington, DC 20017 202-8973408 tomsabella7@gmail.com </p>
Derechos de Participante	<p>Si tiene alguna pregunta sobre sus derechos como participante en una investigación o desea informar una lesión relacionada con la investigación, por favor póngase en contacto con:</p> <p align="center"> University of Maryland College Park Institutional Review Board Office 1204 Marie Mount Hall College Park, Maryland, 20742 E-mail: irb@umd.edu Telephone: 301-405-0678 </p> <p>Esta investigación ha sido revisada de acuerdo con la Universidad de Maryland, College Park procedimientos IRB para la investigación en seres humanos.</p>
Declaración de consentimiento	<p>Su firma indica que usted tiene al menos 18 años de edad; usted ha leído este formulario de consentimiento o la ha tenido lea a usted; sus preguntas han sido contestadas a su satisfacción y voluntariamente está de acuerdo en participar en este estudio de investigación. Usted recibirá una copia de este formulario de consentimiento firmado.</p> <p>Si está de acuerdo en participar, por favor indique si usted está dispuesto a tener su entrevista grabada con un dispositivo electrónico de registro y firme su nombre abajo.</p>
	<p><input type="checkbox"/> Acepto que mi entrevista sea grabada.</p> <p><input type="checkbox"/> No estoy de acuerdo para que mi entrevista sea grabada.</p>
Firma y Fecha	Nombre de Participante [en letra de molde]
	Firma de participante
	Fecha

Appendix F: ORI survey English/Spanish

Antonak, R. F., & Larrivee, B. (1995). Psychometric analysis and revision of the Opinions Relative to Mainstreaming Scale. *Exceptional Children*, 62, 139- 149.

Opinions Relative To The Integration Of Students With Disabilities

General Directions: Educators have long realized that one of the most important influences on a child's educational progress is the classroom teacher. The purpose of this questionnaire is to obtain information that will aid school systems in increasing the classroom teacher's effectiveness with students with disabilities placed in his or her classroom. Please circle the number to the left of each item that best describes your agreement or disagreement with the statement. There are no correct answers: the best answers are those that honestly reflect your feelings. There is no time limit, but you should work as quickly as you can.

Please respond to every statement.

KEY

-3: I disagree very much	+1: I agree a little
-2: I disagree pretty much	+2: I agree pretty much
-1: I disagree a little	+3: I agree very much

-3-2 -1 +1 +2 +3

1. Most students with disabilities will make an adequate attempt to complete their assignments.

-3-2 -1 +1 +2 +3

2. Inclusion of students with disabilities will necessitate extensive retraining of general classroom teachers.

-3-2 -1 +1 +2 +3

3. Inclusion offers mixed group interaction that will foster understanding and acceptance of differences among students.

-3-2 -1 +1 +2 +3

4. It is likely that the student with a disability will exhibit behavior problems in a general classroom.

-3-2 -1 +1 +2 +3

5. Students with disabilities can best be served in general classrooms.

-3-2 -1 +1 +2 +3

6. The extra attention students with disabilities require will be to the detriment of the other students.

-3-2 -1 +1 +2 +3

7.The challenge of being in a general classroom will promote the academic growth of the student with a disability.

-3-2 -1 +1 +2 +3

8. Inclusion of students with disabilities will require significant changes in general classroom procedures.

-3-2 -1 +1 +2 +3

9.Increased freedom in the general classroom creates too much confusion for the student with a disability.

-3-2 -1 +1 +2 +3

10.General-classroom teachers have the ability necessary to work with students with disabilities.

-3-2 -1 +1 +2 +3

11.The presence of students with disabilities will not promote acceptance of differences on the part of students without disabilities.

3-2 -1 +1 +2 +3

12.The behavior of students with disabilities will set a bad example for students without disabilities.

-3-2 -1 +1 +2 +3

13.The student with a disability will probably develop academic skills more rapidly in a general classroom than in a special classroom.

-3-2 -1 +1 +2 +3

14. Inclusion of the student with a disability will not promote his or her social independence.

-3-2 -1 +1 +2 +3

15.It is not more difficult to maintain order in a general classroom that contains a student with a disability than in one that does not contain a student with a disability.

-3-2 -1 +1 +2 +3

16.Students with disabilities will not monopolize the general-classroom teacher's time.

-3-2 -1 +1 +2 +3

17.The inclusion of students with disabilities can be beneficial for students without disabilities.

-3-2 -1 +1 +2 +3

18.Students with disabilities are likely to create confusion in the general classroom.

-3-2 -1 +1 +2 +3

19. General-classroom teachers have sufficient training to teach students with disabilities.

3-2 -1 +1 +2 +3

20. Inclusion will likely have a negative effect on the emotional development of the student with a disability.

-3-2 -1 +1 +2 +3

21. Students with disabilities should be given every opportunity to function in the general classroom where possible.

-3-2 -1 +1 +2 +3

22. The classroom behavior of the student with a disability generally does not require more patience from the teacher than does the classroom behavior of the student without a disability.

-3-2 -1 +1 +2 +3

23. Teaching students with disabilities is better done by special- than by general-classroom teachers.

-3-2 -1 +1 +2 +3

24. Isolation in a special classroom has a beneficial effect on the social and emotional development of the student with a disability.

-3-2 -1 +1 +2 +3

25. The student with a disability will not be socially isolated in the general classroom.

ORI -Opiniones Relativas a la Inclusión de estudiantes con discapacidades

Antonak, R. F., & Larrivee, B. (1995). Psychometric analysis and revision of the Opinions Relative to Mainstreaming Scale. *Exceptional Children*, 62, 139-149.

Indicaciones generales: Los/Las educadores se han dado cuenta desde hace tiempo que una de las influencias más importantes en el progreso educativo de la niñez es el maestro/a de la clase. El propósito de este cuestionario es obtener información que ayudará a los sistemas escolares a aumentar la eficacia del maestro/a con aquellos estudiantes con discapacidades quienes sean parte de sus clases. Por favor, indique el número a la izquierda de cada elemento que mejor describa su acuerdo o desacuerdo con la declaración. No hay respuestas “correctas”, es decir, las mejores respuestas son las que reflejan honestamente sus sentimientos. No hay límite de tiempo para cumplir con la encuesta, pero se debe trabajar lo más rápido que pueda.

CLAVE

Indique su respuesta con un círculo sobre su selección. Favor de contestar todas las preguntas.

- | | |
|--------------------------------------|------------------------------------|
| -3: Estoy totalmente en desacuerdo | +1: Estoy de acuerdo un poco |
| -2: Estoy parcialmente en desacuerdo | +2: Estoy parcialmente de acuerdo |
| -1: Estoy un poco en desacuerdo | +3: Estoy completamente de acuerdo |

1. La mayoría de los/las estudiantes con discapacidades harán un intento adecuado para completar sus tareas.
- 3 - 2 - 1 + 1 + 2 + 3
2. La inclusión de los/las estudiantes con discapacidad necesitará una nueva preparación de los profesores en aulas generales.
- 3 - 2 - 1 + 1 + 2 + 3
3. La inclusión ofrece posibilidades de interacción en clase, lo cual favorecerá la comprensión y aceptación de las diferencias entre los/las estudiantes.
- 3 - 2 - 1 + 1 + 2 + 3
4. Es probable que un estudiante con discapacidad mostrará problemas de conducta en un aula general.
- 3 - 2 - 1 + 1 + 2 + 3
5. Las necesidades de los/las estudiantes con discapacidades pueden ser mejor atendidas en las aulas generales.
- 3 - 2 - 1 + 1 + 2 + 3
6. La atención extra que los/las estudiantes con discapacidad requieren será en detrimento de los/las otros estudiantes.
- 3 - 2 - 1 + 1 + 2 + 3

7. El reto de estar en un aula general será promover el crecimiento académico de un estudiante con discapacidad.
- 3 - 2 - 1 + 1 + 2 + 3
8. La inclusión de los/las estudiantes con discapacidad requerirá cambios significativos en los procedimientos del aula general.
- 3 - 2 - 1 + 1 + 2 + 3
9. El aumento de las libertades en aulas generales crea demasiada confusión para un estudiante con discapacidad.
- 3 - 2 - 1 + 1 + 2 + 3
10. Los/Las Profesores del aula general tienen la capacidad necesaria para trabajar con los/las estudiantes con discapacidades.
- 3 - 2 - 1 + 1 + 2 + 3
11. La presencia de estudiantes con discapacidades no va a promover la aceptación de las diferencias entre los/las estudiantes sin discapacidades.
- 3 - 2 - 1 + 1 + 2 + 3
12. El comportamiento de los/las estudiantes con discapacidades será un mal ejemplo para los/las estudiantes sin discapacidad.
- 3 - 2 - 1 + 1 + 2 + 3
13. Un estudiante con una discapacidad, probablemente desarrollará habilidades académicas más rápidamente en un aula general que en un aula especial.
- 3 - 2 - 1 + 1 + 2 + 3
14. La inclusión de un estudiante con una discapacidad no promoverá su independencia social.
- 3 - 2 - 1 + 1 + 2 + 3
15. No es más difícil de mantener el orden en un aula general, que contiene un estudiante con una discapacidad que en uno que no contenga un estudiante con una discapacidad.
- 3 - 2 - 1 + 1 + 2 + 3
16. Los/Las estudiantes con discapacidades no monopolizarán el tiempo del maestro/a en una aula general.
- 3 - 2 - 1 + 1 + 2 + 3
17. La inclusión de estudiantes con discapacidades puede ser beneficiosa para los/las estudiantes sin discapacidades.
- 3 - 2 - 1 + 1 + 2 + 3
18. Los/Las Estudiantes con discapacidades tienden a crear confusión en el aula general.
- 3 - 2 - 1 + 1 + 2 + 3
19. Los/Las Profesores generales tienen la suficiente formación para enseñar a los/las estudiantes con discapacidades.
- 3 - 2 - 1 + 1 + 2 + 3

20. La inclusión probablemente tendrá un efecto negativo en el desarrollo emocional de un estudiante con discapacidad.

- 3 - 2 - 1 + 1 + 2 + 3

21. Los/Las estudiantes con discapacidad deben tener todas las oportunidades para involucrarse en el aula general, siempre que sea posible.

- 3 - 2 - 1 + 1 + 2 + 3

22. El comportamiento en el aula de un estudiante con discapacidad no requiere más paciencia del maestro/a que la que requiere el comportamiento de un estudiante sin discapacidad.

- 3 - 2 - 1 + 1 + 2 + 3

23. La Enseñanza de los/las estudiantes con discapacidades es mejor hecha por maestros/as de un aula especial que por los del aula general.

- 3 - 2 - 1 + 1 + 2 + 3

24. Aislar a un estudiante con discapacidad en un aula especial tiene un efecto beneficioso en el desarrollo social y emocional de un estudiante con discapacidad.

- 3 - 2 - 1 + 1 + 2 + 3

25. Un estudiante con una discapacidad no será socialmente aislado en el aula general.

- 3 - 2 - 1 + 1 + 2 + 3

Appendix G: Teacher questionnaire English/Spanish

PART 1 Identification Data

TEACHER QUESTIONNAIRE ON INCLUSION OF CHILDREN WITH SPECIAL NEEDS IN ORDINARY SCHOOLS

Indicate your answer by with a circle.

2. Age _____

2. – Gender (1) Female (2) Male

3. How many years teaching experience do you have: _____

4. Education Level which you teach:

(1) First Grade (2) Second grade (3) Third grade (4) Fourth grade

(5) Fifth grade (6) Sixth grade

5. What degree or degrees do you have?

(1) Teachers Degree in Early Childhood (2) Teachers Degree in Basic Education

(3) Teachers Degree in Special Education (4) Bachelor of Science in Education.

Specialty: _____ (5) Bachelor of Early Childhood Education (6)

Bachelor of Psychology (7) Other: _____

6. How many hours of training in special education or inclusion of children with special needs have you completed? _____

Specify where:

7. Does your school have inclusion for pupils with special needs? (1) Yes (2) No

8. How many students with disabilities have you had in your classroom (including now)?

(1) 0 [Go to 10] (2) 1 student (3) 2-5 students (4) 6- 10 students (5) more than 10 students

9. Which type of disabilities do students have or have had in your class?

10. How many people in your extended family or among your friends have disabilities?

(1) 0 (2) 1 persona (3) 2-5 personas (4) 6- 10 personas

(5) más que 10 personas

Part Two:

Teachers' Opinions

What factors can contribute to the inclusion of children with disabilities in El Salvador?

What do you think are the barriers to inclusion of children with disabilities in El Salvador?

PRIMERA PARTE: DATOS DE IDENTIFICACION

Cuestionario de opiniones del profesorado sobre la inclusión en las escuelas de los niños/as con discapacidades

Indique su respuesta con un círculo.

1.- Edad (Años cumplidos) _____ **2.- Sexo:** (1) Mujer (2) Hombre

3.- ¿Cuántos años de experiencia tenga como un docente: _____

4.- Nivel educativo en el que imparte clases:

(1) Primer grado	(2) Segundo grado	(3) Tercer grado
(4) Cuarto grado	(5) Quinto grado	(6) Sexto grado

5.- ¿Qué titulación o titulaciones posee?

(1) Profesorado en Parvularia	(2) Profesorado en Educación Básica	(3) Profesorado en Educación Especial
(4) Licenciatura en Ciencias de la Educación. especialidad? _____	(5) Licenciatura en Educación Parvularia	(6) Licenciatura en Psicología
7) Otros:		

6.- ¿Cuántas horas ha realizado de algún tipo de formación relacionado con la Educación Especial o con la inclusión de los estudiantes con discapacidades? _____

Especificar donde: _____

7. ¿Su centro educativo tiene incluidos estudiantes con discapacidades?

(1) Sí (2) No

8.- ¿Cuántos estudiantes con discapacidades ha tenido usted en su aula (ahora incluido)?

(1) 0 [Pase a 10] (2) 1 estudiante (3) 2-5 estudiantes (4) 6- 10 estudiantes (5) más que 10 estudiantes

9.- ¿Qué tipo de discapacidades tiene o han tenido los estudiantes en su clase?

10.- Cuantas personas de su familia extendida o sus amigos tienen discapacidades?

(1) 0 (2) 1 persona (3) 2-5 personas (4) 6- 10 personas (5) más que 10 personas

Segunda Parte:

Opiniones de los maestros

¿Que aspectos pueden contribuir a la inclusión de niño/as con discapacidades en El Salvador?

¿Cuáles piensa que son las barreras a la inclusión de niño/as con discapacidades en El Salvador?

Appendix H: Teacher interview consent form English/Spanish

University of Maryland College Park

Page 1 of 2

Initials _____ Date _____

Project Title	Teacher's attitudes toward inclusion of children with disabilities in rural El Salvador
Purpose of the Study	This research is being conducted by Thomas Sabella, a doctoral student at University of Maryland, College Park under the supervision of Dr. Paula Beckman, pbeckman@umd.edu. I am inviting you to participate in this research project because you work in the field of education in El Salvador. The purpose of this research project is to investigate the education services of children with disabilities and teachers' attitudes toward inclusion of children with disabilities in rural El Salvador.
Procedures	The procedures involve Thomas Sabella interviewing each participant for about 1 one hour and asking open questions regarding inclusion of children with disabilities. Some examples of questions are: "What experience have you had with people with disabilities? What do you think about inclusion of students with disabilities in classes in El Salvador?" I will use an electronic recording device to record the interview. The interview will take place at your worksite or in a place of your choosing. I will provide you with a summary of the first interview when we have a second interview to confirm your understanding of what was said at the first interview and to ask you any additional questions. The second interview will last about 1 hour.
Potential Risks and Discomforts	The only known risk for participants is the loss of confidentiality. However all effort will be made by Thomas Sabella to preserve confidentiality and no names or identifying information for participants, only pseudonyms, will be printed in any publications resultant of this research.
Potential Benefits	There are no direct benefits from participation in this research. You will have the opportunity to share your opinions regarding inclusion. You will also be provided with a summary of the study's findings about the education services of children with disabilities and teachers' attitudes toward inclusion of children with disabilities in rural El Salvador.
Confidentiality	Any potential loss of confidentiality will be minimized by using pseudonyms for all participants interviewed in all notes and analysis. All data and audio recordings will be maintained on the password protected computer of the investigator, Thomas Sabella. If I write a report or article about this research project, your identity will be protected to the maximum extent possible. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law.
Right to Withdraw and Questions	Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.

University of Maryland College Park

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Initials _____ Date _____

	<p>If you decide to stop taking part in the study, if you have questions, concerns, or complaints, or if you need to report an injury related to the research, please contact the investigator:</p> <p style="text-align: center;"> <i>Thomas V Sabella</i> 4208 14th St NE Washington DC 20017 USA +1-202-997-5408 tomsabella7@gmail.com </p>			
Participant Rights	<p>If you have questions about your rights as a research participant or wish to report a research-related injury, please contact:</p> <p style="text-align: center;"> University of Maryland College Park Institutional Review Board Office 1204 Marie Mount Hall College Park, Maryland, 20742 E-mail: irb@umd.edu Telephone: 301-405-0678 </p> <p>This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.</p>			
Statement of Consent	<p>Your signature indicates that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study. You will receive a copy of this signed consent form.</p> <p>If you agree to participate, please indicate if you are willing to have your interview recorded with an electronic recording device and sign your name below.</p>			
	<p><input type="checkbox"/> I agree to have my interview recorded.</p> <p><input type="checkbox"/> I do not agree to have my interview recorded.</p>			
Signature and Date	<table border="1" style="width: 100%;"> <tr> <td>NAME OF PARTICIPANT [Please Print]</td></tr> <tr> <td>SIGNATURE OF PARTICIPANT</td></tr> <tr> <td>DATE</td></tr> </table>	NAME OF PARTICIPANT [Please Print]	SIGNATURE OF PARTICIPANT	DATE
NAME OF PARTICIPANT [Please Print]				
SIGNATURE OF PARTICIPANT				
DATE				

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Initials _____ Date _____

Título de Proyecto	Actitudes de maestros sobre inclusión de estudiantes con discapacidades en áreas rurales de El Salvador.
Propósito de Estudio	Esta investigación está siendo llevada a cabo por Thomas Sabella en la Universidad de Maryland, College Park, bajo la supervisión de la Dra. Paula Beckman, pbeckman@umd.edu. Les invitamos a participar en este proyecto de investigación porque usted trabaja en educación en El Salvador. Los servicios de educación para niños y niñas con discapacidades, y las actitudes de maestros sobre inclusiones de estudiantes con discapacidades es el propósito de este proyecto de investigación.
Procedimientos	Mediante este procedimiento, Thomas Sabella al entrevistar a cada participante por aproximadamente 1 hora y hace preguntas abiertas respecto a la inclusión de niños con discapacidad. Algunos ejemplos de preguntas son: "¿Qué experiencia han tenido con las personas con discapacidad? ¿Qué piensa usted acerca de la inclusión de alumnos con discapacidad en las clases en El Salvador " Voy a utilizar un dispositivo electrónico de registro para grabar la entrevista. La entrevista se llevará a cabo en su lugar de trabajo o en un lugar de su elección. Yo le proporcionare un resumen de la primera entrevista cuando tenemos una segunda entrevista para confirmar su comprensión de lo que se dijo en la primera y hacer cualquier pregunta adicional. La segunda entrevista tendrá una duración de aproximadamente 1 hora.
Posibles riesgos y Molestias	El único riesgo conocido para los participantes es la pérdida de confidencialidad. Sin embargo, todo esfuerzo será hecho por Thomas Sabella para preservar la confidencialidad y no usará nombres o información de identificación para los participantes, sólo seudónimos, se imprimirá en cualquier publicación resultante de esta investigación.
Posibles Beneficios	No hay beneficios directos de la participación en esta investigación. Usted tendrá la oportunidad de compartir sus opiniones con respecto a la inclusión. También se le proporcionará un resumen de las conclusiones del estudio sobre los servicios de educación de los niños y niñas con discapacidades y actitudes de los profesores hacia la inclusión de los niños y niñas con discapacidad en áreas rurales de El Salvador.
Confidencialidad	Cualquier posible pérdida de confidencialidad será minimizada mediante el uso de seudónimos para todos los participantes entrevistados en todas las notas y análisis. Todos los datos y grabaciones de audio se mantienen en el equipo protegido por contraseña del investigador, Thomas Sabella. Si escribo un informe o artículo sobre este proyecto de investigación, su identidad será protegida al máximo grado posible. Puede ser compartida con su información Representantes de la Universidad de Maryland, College Park o las autoridades gubernamentales en si usted o alguien más está en peligro o si estamos obligados a hacerlo por ley.
Derecho de Retiro y Preguntas	Su participación en esta investigación es completamente voluntaria. Usted puede optar por no participar en absoluto. Si usted decide participar en esta investigación, es posible que usted puede parar en cualquier momento. Si usted decide no participar en este estudio o si se

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Initials _____ Date _____

	<p>detiene en cualquier momento, usted no será penalizado o perderá ningún beneficio al cual usted reúne los demás requisitos.</p> <p>Si decide dejar de tomar parte en el estudio, si usted tiene preguntas, inquietudes o quejas, o si necesita reportar una lesión relacionada con la investigación, por favor póngase en contacto con el investigador:</p> <p align="center"> Thomas V Sabella 4208 14th St NE Washington, DC 20017 202-9975408 tomsabella7@gmail.com </p>
Derechos de Participante	<p>Si tiene alguna pregunta sobre sus derechos como participante en una investigación o desea informar una lesión relacionada con la investigación, por favor póngase en contacto con:</p> <p align="center"> University of Maryland College Park Institutional Review Board Office 1204 Marie Mount Hall College Park, Maryland, 20742 E-mail: irb@umd.edu Telephone: 301-405-0678 </p> <p>Esta investigación ha sido revisada de acuerdo con la Universidad de Maryland, College Park procedimientos IRB para la investigación en seres humanos.</p>
Declaración de consentimiento	<p>Su firma indica que usted tiene al menos 18 años de edad; usted ha leído este formulario de consentimiento o a menos alguien, se la ha leído a usted; sus preguntas han sido contestadas a su satisfacción y voluntariamente está de acuerdo en participar en este estudio de investigación. Usted recibirá una copia de este formulario de consentimiento firmado.</p> <p>Si está de acuerdo en participar, por favor indique si usted está dispuesto a tener su entrevista grabada con un dispositivo electrónico de registro y firme su nombre abajo.</p>
	<p><input type="checkbox"/> Acepto que mi entrevista sea grabada.</p> <p><input type="checkbox"/> No estoy de acuerdo para que mi entrevista sea grabada.</p>
Firma y Fecha	Nombre de Participante [en letra de molde]
	Firma de participante
	Fecha

Appendix I: Open-ended interview protocol English/Spanish

Lead questions	Follow up questions
Tell me about your school in general.	<ul style="list-style-type: none"> • The students? • Administration? • Policy? • Have there been students with disabilities in your school? • If yes, how did this go? • If no, do you have any idea why not? • What did other students, without disabilities interact with these children?
Tell me about your classroom.	<ul style="list-style-type: none"> • Have you had students with disabilities in your class? Tell me about this experience • What disabilities did they have? • How did the other students interact with them?
What experience have you had with people with disabilities?	<ul style="list-style-type: none"> • In your family? • Your Friends, or neighbors? • How did this affect you?
Have you had training related to disability or inclusion?	<ul style="list-style-type: none"> • Tell me about this training? Where was it? What did you learn • How did the training affect you? • What training is still needed? What kind of training would be good?
What do you think about inclusion of students with disabilities in classes in El Salvador? Which disabilities?	<ul style="list-style-type: none"> • How would this be possible? What is needed? • What are the good parts? What are the most difficult parts? • Could you teach a child with a disability in your classroom? • What would you need?

Preguntas primeros	Preguntas siguientes
Dígame sobre tu escuela en general	<ul style="list-style-type: none"> • los/las estudiantes? • Administración? • Políticas? • ¿Ha habido estudiante con discapacidad en su escuela? • En caso afirmativo, --cómo han sido fue? • Si no - ¿tiene alguna idea de por qué no ha habido? • ¿Qué hicieron los/las otros estudiantes (sin discapacidad) ante su presencia?
Dígame sobre la discapacidad en su aula.	<ul style="list-style-type: none"> • ¿Ha tenido estudiantes con una discapacidad en su clase? Háblame de esta experiencia. ¿Qué discapacidad? • ¿Qué hicieron los/las otros estudiantes (sin discapacidad) ante su presencia
¿Qué experiencias ha tenido, usted, con discapacidades?	<ul style="list-style-type: none"> • ¿Su familia? • ¿Sus amigos, vecinos? • ¿Cómo te afectó?
¿Usted ha tenido alguna formación relacionada con la discapacidad o la inclusión?	<ul style="list-style-type: none"> • ¿Háblame de la capacitación? • ¿Dónde? Cuánto tiempo? • ¿Qué aprendió? • ¿Cómo te afectó? • ¿Que más necesita todavía? ¿Qué formación sería bueno?
<p>¿Qué piensa usted acerca de la inclusión de los/las estudiantes con discapacidad en las aulas en El Salvador?</p> <p>¿Cuál discapacidades?</p>	<ul style="list-style-type: none"> • ¿Cómo podría ser posible? Que se necesitaría? • ¿Cuáles son las partes buenas? ¿Cuáles son las partes malas (difíciles)? • ¿Usted podría enseñar a un estudiante con una discapacidad en su clase? • ¿Qué necesitaría?

Appendix J: Observation Guide

Date_____ School_____ Grade_____

Description of lesson or activity	Evidence of teacher planning
Teacher communication of expectations	Teacher response to student work
Teacher interaction w/ ____ struggling or ____disabled students	Evidence of differentiated expectations for ____ struggling or ____disabled students

Appendix K: Disability categories listed in Ministry attendance book

<i>Libro de Registro</i> (MINED, 2015).			
#	Category in Spanish (original)	Category in English	Translation of Category description given in document
0	Ninguno	None	
1	Ceguera	Blindness	Total loss of vision or slight perception of light
2	Baja Vision (remamente visual no funcionales)	Low Vision	He/She has residual vision that allows him/her to be guided by light and by perception of masses. Vision problem can be corrected with glasses
3	Sordera	Deafness	Severe hearing impairment that hinders student in processing linguistic information through hearing, with or without amplification.
4	Hipoacusia (baja audicion)	Hearing loss	decrease in hearing sensitivity
5	Sordo-ceguera	Deaf blindness	is a dual sensory impairment, which involves a decrease of vision and hearing, greatly affecting other aspects of development
6	Discapacidad Intelectual	Intellectual disability	Originates before age 18 and is characterized by significant limitations both in intellectual functioning (general mental abilities, such as learning, reasoning, resolution of problems) and in adaptive behavior (conceptual skills, social skills and interpersonal and practical skills of daily living)
7	Discapacidad Motora	Physical disability	Motor problems including difficulties in motor skills and movement of the body, due to different causes (e.g. cerebral palsy, muscular injury, paraplegia, spina bifida, effects of polio)
8	Ausencia de miembros	Absence of limbs (hands and or feet)	(no description given)

	(manos y/o piernas)		
9	Trastornos Generalizados del Desarrollo	Pervasive Development al Disorders:	These are qualitative impairments in social interactions, in verbal and nonverbal communication, by repetitive, stereotypic behavior, and restricted repertoire of interests and activities; this category includes infantile autism, atypical autism, Rett syndrome and Asperger syndrome.
10	Multidiscapacid ad o retos multiples	Multiple disabilities or multiple challenges	When the student has more than one type of disability. These students require proper care for their support in the areas of communication, orientation, daily living, socialization, and overall learning.
11	Otros	Others	

Appendix L: Audit Trail

Data Collection Timeline

Phase	Type of Data	Method of keeping data	Time period
1	ORI Survey and questionnaire	Surveys collected and recorded in excel and SPSS	Weeks 1 and 2
2	First Teacher Interviews and observations Document collection	Interviews recorded digitally, and given to local hire for transcription. Notes from interviews and observations typed into computer. Documents saved in computer	Weeks 2 - 5 month
	Shared transcripts for peer debriefing	Email	Weeks 6-7
2	Second Teacher Interviews and observations	Interviews recorded digitally, and given to local hire for transcription. Notes from interview and observations typed into computer	Weeks 8 – 11
1 and 2	Interviews with officials from MINED and non-government orgs.	Interviews recorded digitally, and given to local hire for transcription. Notes from interview typed into computer	Weeks 3 - 11

Appendix M: List of Codes

	List of Codes	Occurrence
1	Appropriate curriculum	10
2	Aula de apoyo (resource room)	12
3	Barriers to inclusion	27
4	Benefits of inclusion	22
5	Causes of disability	7
6	classroom management	33
7	conduct issues	12
8	context information	13
9	culture of Inclusive education	7
10	DAI (inclusion support teachers)	27
11	Diagnosis	7
12	Disability categories	87
13	distance to school and transportation	34
14	Education as Human Right	12
15	(EITP) Full time inclusive schools	10
16	family cooperation	101
17	inclusion definition	12
18	Individual Planning	41
19	Infrastructure	35
20	large classes	8
21	LD or significant learn problems	72
22	Lesson plans	18
23	Limited administrative resources	10
24	Male teacher	3
25	Medical organization help	23

26	(MINED) Ministry of Education plans	42
27	Mixed grade classes	16
28	Observer effect	7
29	Open schools	49
30	Out of school children	20
31	Peer interaction	31
32	Poverty	11
33	Professional support	78
34	Public knowledge	19
35	Quitting school	5
36	(RED) Teacher support group or net	13
37	Repeating grades	8
38	Resources needed	71
39	Rural disadvantage	17
40	Separate Education	92
41	Severity of Disability	21
42	Socially appropriate response	2
43	Stigma/discrimination	19
44	Teacher ability to teach children with disabilities	21
45	Teacher family or friend experience	9
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47	Teacher self-study on disability	6
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49	Teacher	33
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